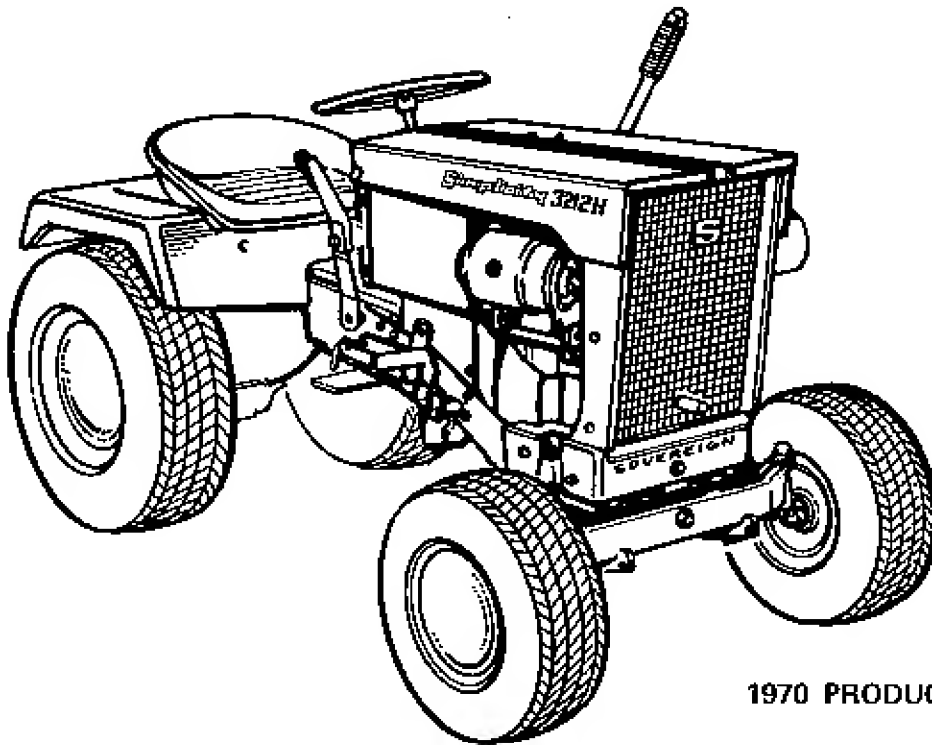


# ***Simplicity***

## **SOVEREIGN** > **HYDROSTATIC DRIVE** **RIDING TRACTORS**



1970 PRODUCTION YEAR

**Mfrs. No. 572-3212H MANUAL LIFT**  
**Mfrs. No. 573-3212H POWER LIFT**

**SIMPLICITY MANUFACTURING COMPANY,**

**1321**  
LITHO IN U.S.A.

Should warranty service be necessary, the information below should be presented to the authorized SIMPLICITY Dealer.

Customer's Name \_\_\_\_\_

Address \_\_\_\_\_

Mfg. No. \_\_\_\_\_ Serial No. \_\_\_\_\_

Date Purchased \_\_\_\_\_

Purchased From \_\_\_\_\_

Address \_\_\_\_\_

Engine Model No. \_\_\_\_\_ Serial No. \_\_\_\_\_ Type No. \_\_\_\_\_

To obtain replacement parts from dealer, advise quantity, part number and description.

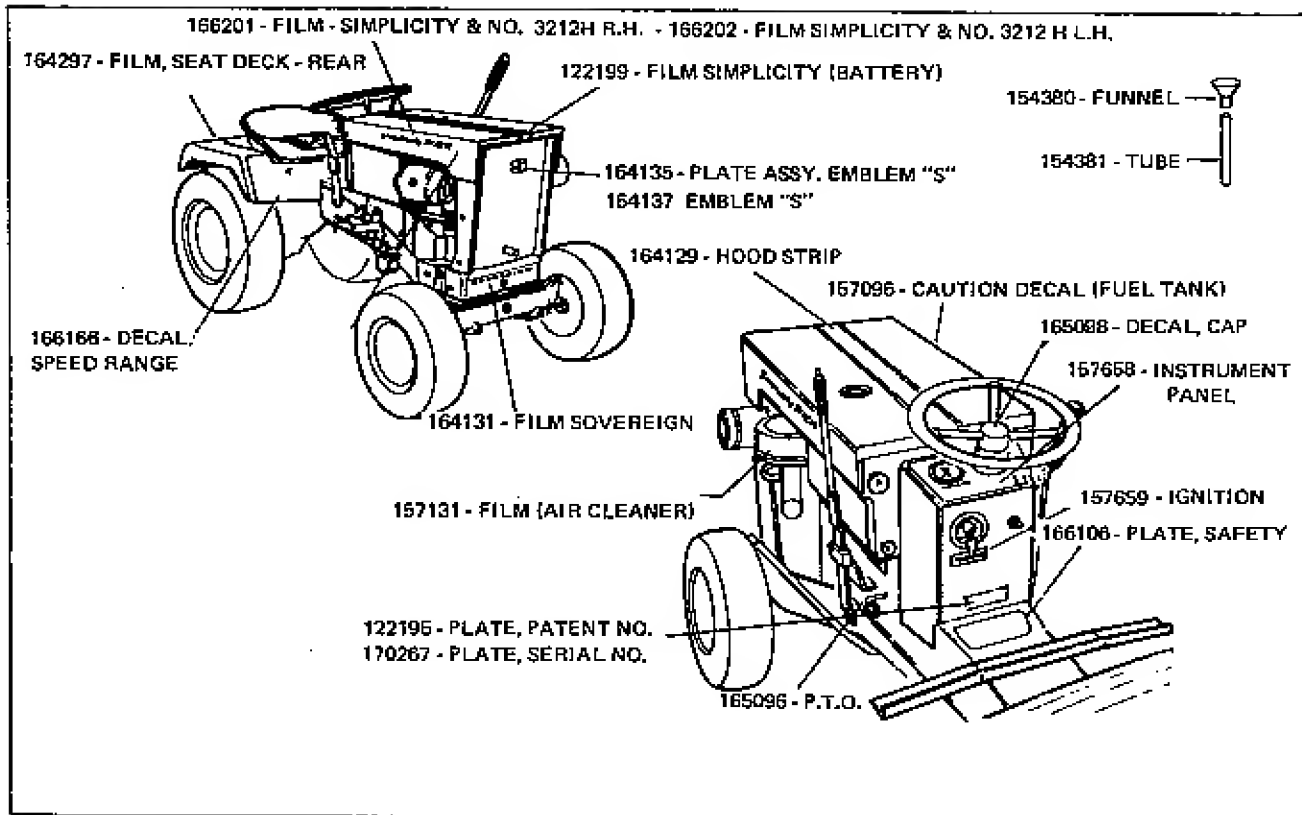


Remember...

**FOR YOUR SAFETY**

1. ALWAYS STOP ENGINE BEFORE LEAVING MACHINE
2. ALWAYS STOP ENGINE BEFORE SERVICING OR ADJUSTING MACHINE OR EQUIPMENT
3. ALWAYS KEEP HANDS, FEET AND CLOTHING AWAY FROM POWER-DRIVEN PARTS

## DECALS



## PACKING

This tractor is delivered complete in one carton. The carton contains:

- 1 - Tractor Assembly
- 1 - Steering Wheel (in skin pack)
- 1 - Hardware Pack

Should any shortages of the above items occur, advise by stating packers number listed on green packing slip, serial number of tractor, part number and description of items missing.

## ASSEMBLY

### BATTERY

Remove battery from tractor. Service as stated in the battery instructions. Replace and secure battery in tractor.

### STEERING WHEEL

Assemble steering wheel on the steering shaft using the woodruff key and setscrew which is provided in the hardware pack. Assemble steering cap over hub of steering wheel.

### ENGINE LUBRICATION

Service air cleaner and crankcase as recommended in Engine Service Manual. Be sure air cleaner is maintained in clean condition. Never use oil in crankcase for more than 25 hours of operation. See Figure 11. **CLEAN AIR AND CLEAN ENGINE OIL WILL GIVE LONG TROUBLE FREE OPERATION. DIRT WILL RUIN YOUR ENGINE IN A**

**SHORT TIME.** A funnel and extension are included with the tractor for use in changing oil.

The bevel gear housing has a capacity of one pint of SAE 90 oil and is filled at the factory. It will not normally require replenishment, but occasionally check drain plug for tightness and oil seals for leakage. Keep oil up to level of filler plug. See Figure 8.

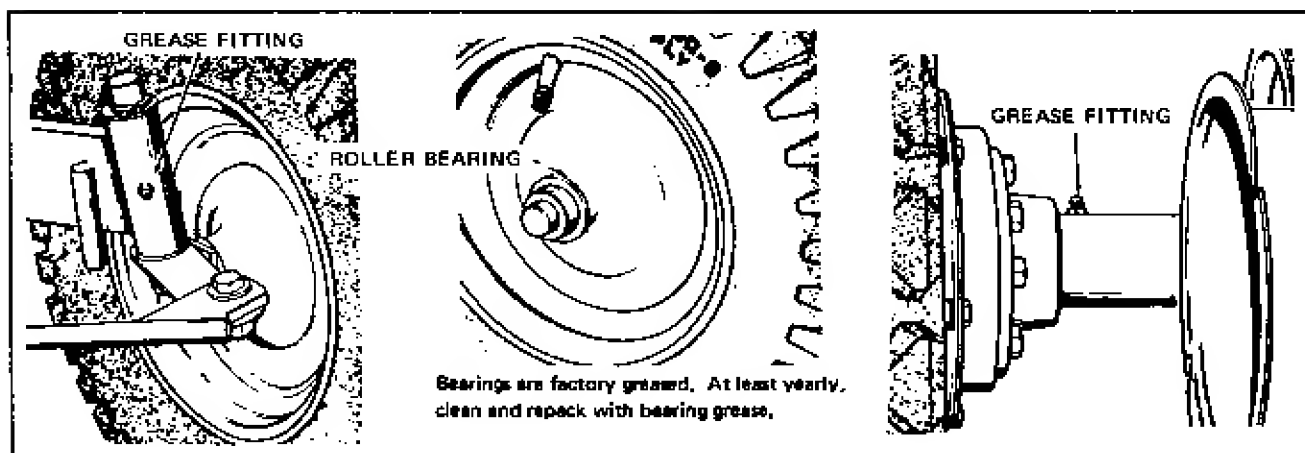
### TRACTOR LUBRICATION

The tractor has a total of 3 grease fittings which require lubrication with general purpose automotive grease. Use a standard grease gun for the following fittings:

- (2) Front Spindles
- (1) Rear Axle Tube

Before lubricating, wipe each grease fitting with a rag to prevent grit and dirt from being carried into bearings with new grease.

The transmission has a capacity of 1-1/2 qts. of SAE 90 oil and is filled at the factory. It will not normally require replenishment, but occasionally check drain plug for tightness and axle tube oil seals for leakage. Maintain oil level at lower edge of filler plug hole. Remove vent plug from top of transmission and allow oil to settle to normal level before checking. See Figure 7.



LUBRICATION POINTS

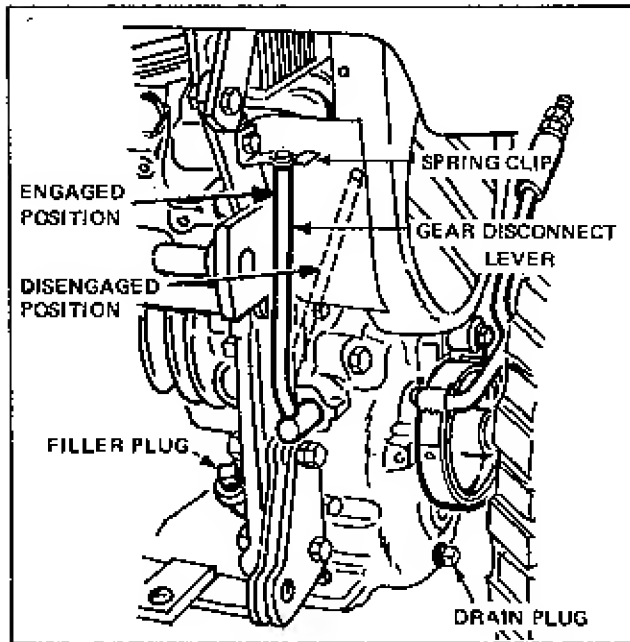


Figure 7

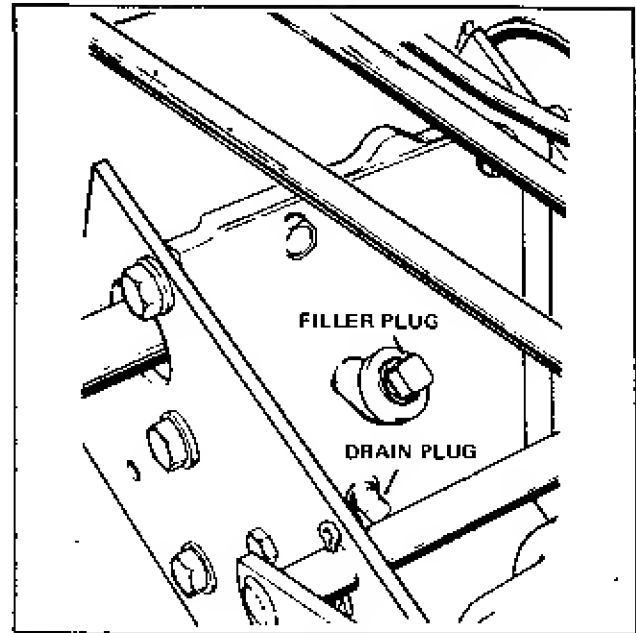


Figure 8

## STARTING ENGINE

1. Move the gear disconnect lever, located on the rear of the transmission to a vertical position to engage the transmission. See Figure 7.
2. Move the hydrostatic control lever to neutral position. See Figure 9. (Note: The engine will not start if this lever is not in neutral).
3. Depress the clutch and brake pedal as far as it will go. See Figure 11.
4. Pull choke knob out as necessary.
5. Turn the key to start the engine.

## TO STOP ENGINE

Depress the clutch and brake pedal and move the hydrostatic control lever to neutral position. The trigger on the control lever must be squeezed against the lever to pull the lever back to neutral.

With hydrostatic control lever in neutral, the brake is engaged. Turn the ignition key to vertical (off) position and remove key for safekeeping. Apply parking brake.

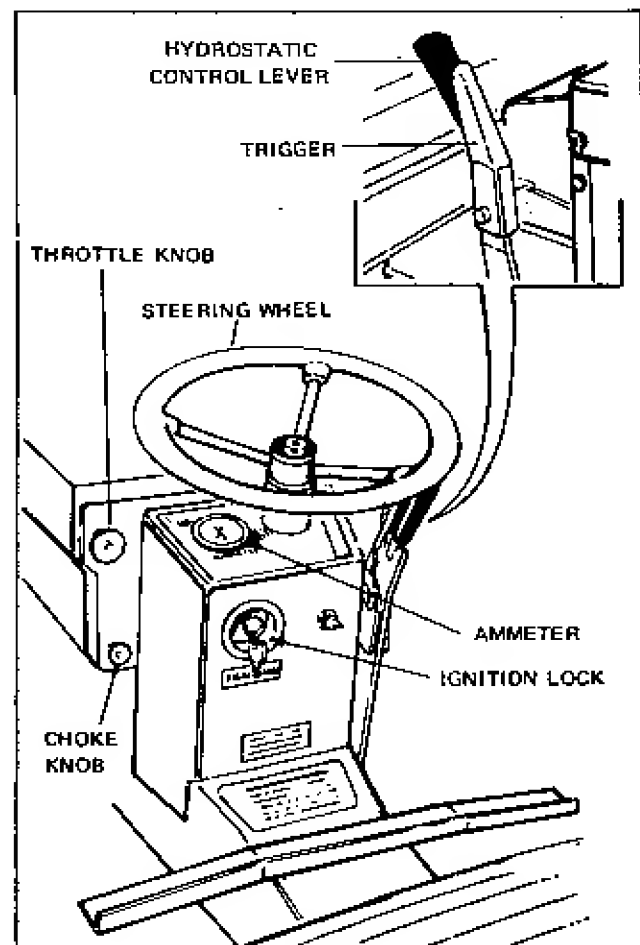


Figure 9

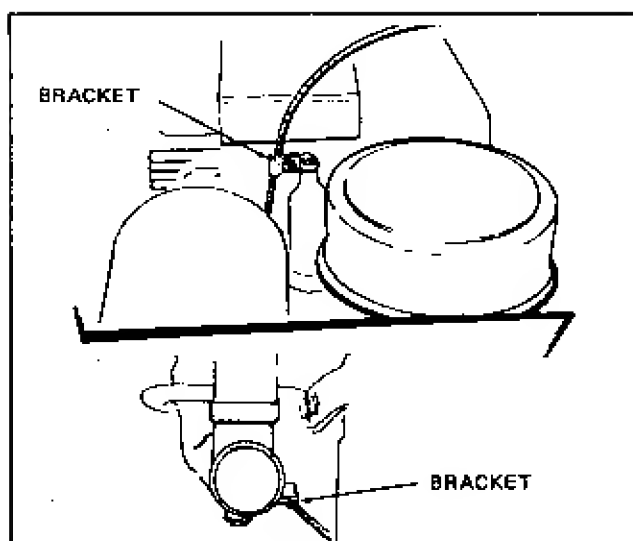


Figure 10

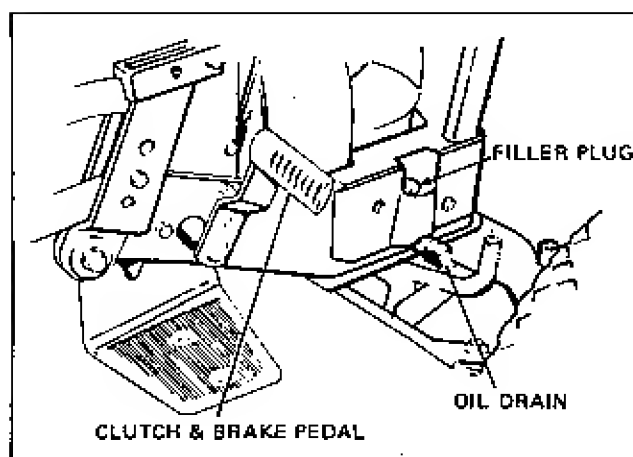


Figure 11

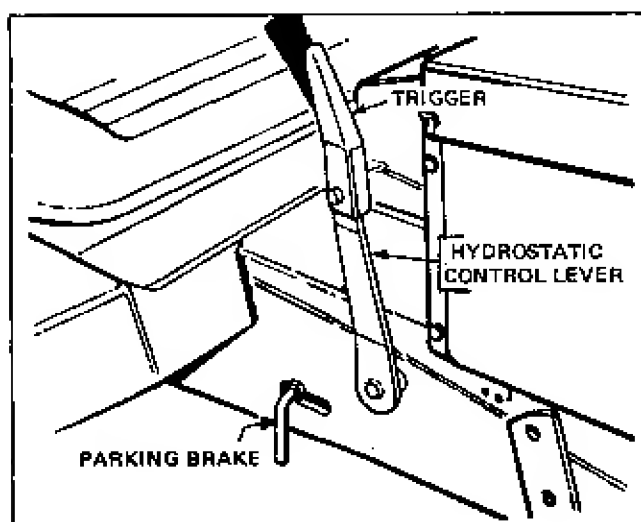


Figure 12

## GEAR DISCONNECT LEVER

This lever is used to engage the transmission for running and to disengage the transmission if the tractor has to be moved without engine power. See Figure 7.

### CAUTION

When gear disconnect lever is moved to disengage position, no brakes can be engaged. Never disengage disconnect lever when tractor is on an incline unless tires are properly blocked.

1. To engage transmission, be sure hydrostatic control lever is in neutral position and move the gear disconnect lever to vertical position until it snaps into the spring clip.

2. To disengage the transmission, pull the gear disconnect lever out of the spring clip and move the lever to the right as far as possible.

## OPERATION OF TRACTOR

With the gear disconnect lever engaged and the engine running, move the hydrostatic control lever forward to go forward and pull it back to go in reverse. Set throttle lever to obtain desired speed. To inch forward or back, place the control lever in forward or reverse position and depress and release the clutch and brake pedal. The hydrostatic control lever can also be used for this but it is better to use the clutch and brake pedal as both hands are then free to steer the tractor.

To stop tractor movement, depress the clutch and brake pedal or move the hydrostatic control lever to neutral position.

## CLUTCH ADJUSTMENT

If the tractor creeps forward or back when the hydrostatic control lever is in neutral, the turnbuckle on the control linkage should be adjusted. See Figure 13.

Loosen the locknuts at each of the turnbuckles and rotate the turnbuckle clockwise or counter-clockwise as necessary until the tractor does not creep.

Retighten the locknuts using two wrenches so turnbuckle will not be moved and observe tractor to be sure it does not creep. Readjust if necessary.

## BRAKE ADJUSTMENT

The brake should be adjusted to provide full braking when the clutch brake pedal is completely depressed.

Place the hydrostatic control lever in neutral position. Depress clutch brake pedal completely and turn the brake band adjusting nut until the brake band is tight against the brake drum. See Figure 13.

## HYDRAULIC SYSTEM MAINTENANCE

To be sure of satisfactory performance it is important that the hydraulic oil is kept absolutely clean and that the level of oil in the oil reservoir be maintained. See Figure 13.

Before checking the hydraulic oil level, be sure the outside of the hydraulic oil reservoir is clean and no debris will enter the reservoir.

Check hydraulic oil level by removing the inspection plug on the side and near the top of the reservoir. If oil runs out of the hole, the reservoir is full and the plug should be replaced. If oil does not run out of the hole, replace the inspection plug, remove the nut and cover from top of the reservoir and add oil to the reservoir until it reaches the level

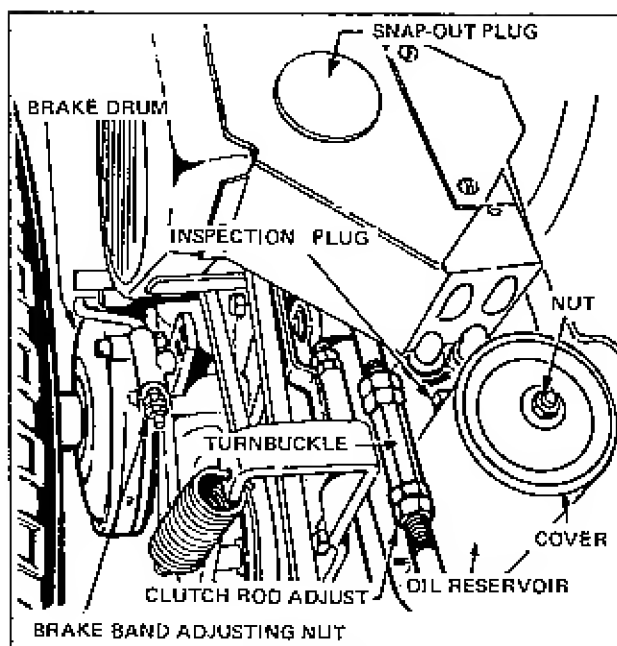


Figure 13

of the inspection plug. Use only Dexron A.T.F. (Automatic Transmission Fluid) which is available locally from several major oil companies.

Capacity of the system is 1-3/4 quarts.

After every five (5) hours of operation (more often in dusty conditions) remove the snap-out plug from the fan and oil cooler housing and clean fan and housing with air or water under pressure. Replace the plug by pressing it onto the hole.

The hydraulic oil filter in the bottom of the reservoir has to be changed only when dirt gets into the hydraulic oil in the reservoir. To change the filter, remove the nut and cover from top of reservoir. Have a container ready to catch the oil and disconnect one of the hoses at the bottom of the oil reservoir. Raise the end of the hose and tie it up so oil will not run out of the transmission.

Drain the oil from the reservoir into the container.

Remove the filter and replace with a new one. Add Dexron Automatic Transmission Fluid to the reservoir up to the level of the inspection plug. Replace the cover and nut on the reservoir.

## DIFFERENTIAL

The tractor is equipped with a controlled traction differential. Tightening the hex head capscrews in the right hand wheel hub (See Figure 14.), provides pressure against a nylon plug and sleeve around the tractor axle and prevents excessive wheel slippage when the tractor is being used under abnormal conditions. The adjusting capscrews are set at the factory to a torque of 25 ft. lbs. As the nylon sets itself through use, it may be necessary to readjust the capscrews a few times to maintain 25 ft. lbs. of torque (25 lbs. weight on wrench 1 ft. long).

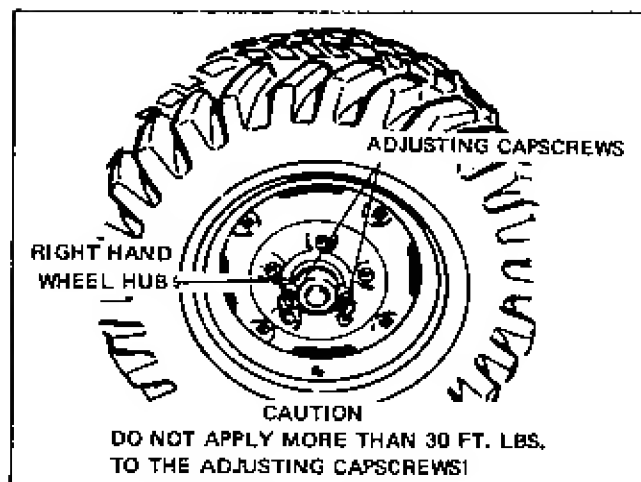


Figure 14

## POWER TAKE-OFF

### LUBRICATION

The power take-off is lubricated by means of one grease fitting located on the bottom front of the drive bracket assembly. Occasionally apply grease by means of a standard grease gun loaded with automotive type grease. Be sure to wipe dirt and grit from grease fitting before applying grease gun. Lubricate all pivot points and idler pulley bearings with SAE 20 oil every few hours of operation.

### OPERATION

Operation of the power take-off is controlled by movement of the clutch lever assembly. See Figure 15. When the clutch lever is in the forward raised position, the clutch rod releases the tension holding the idler pulley against the drive belt and power will not be transmitted to the driven pulley of the power take-off assembly. When the clutch lever is in the back, depressed position, the clutch rod applies tension to the idler pulley and as the idler pulley takes up the slack in the drive belt, power is transmitted from the drive pulley on bevel gear box shaft to the driven pulley of the power take-off. Figure 15 shows clutch lever in drive position.



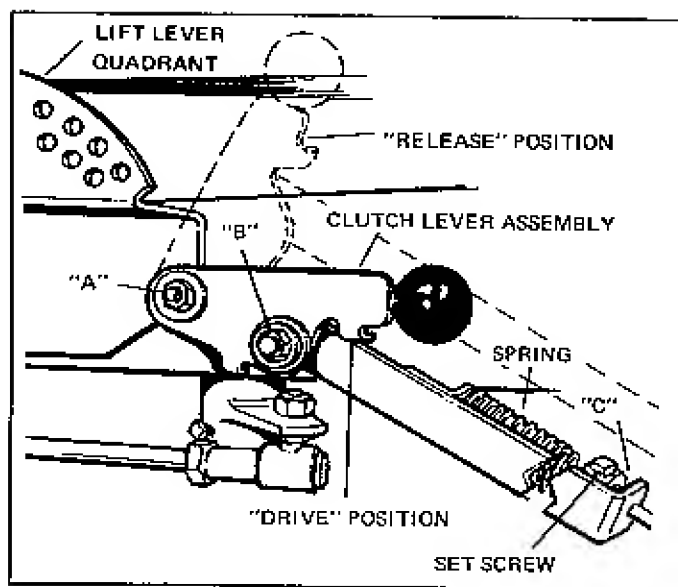


Figure 15

### ADJUSTMENT

At points "A" and "B" of Figure 15, check tightness of hex nut to be sure that clutch lever assembly and clutch rod are free to pivot without binding.

Place clutch lever in "Drive" position and observe clearance between collar "C" (Figure 15) and end of bracket. When implement is attached to tractor, this clearance should normally be approximately  $\frac{3}{4}$ ". At this setting the idler pulley should be snugly against the drive belt. If additional tension is required, release clutch lever and loosen set-screw on collar and slide collar farther back on clutch rod. Retighten setscrew in collar and put clutch lever in "Drive" position. Recheck clearance. The tension of the idler pulley against the drive belt must be sufficient to operate whichever tractor attachment is being used. Any additional tension is unnecessary and will only cause premature failure of belts and idler pulley bearings.

### TIRES

The tires of the tractor are inflated with air pressure in excess of the normal amount for shipment. For comfort of operation, release some of the pressure until a pressure of 12 to 15 lbs. per sq. in. for both front and rear tires. Maintain tires at this pressure.

### OPERATION — POWER LIFT KIT

The Power Lift Kit which is an optional feature on the Landlord & Sovereign Tractors is used to raise and lower various attachments with finger-tip pressure applied to the control lever.

To raise a front mounted attachment, pull the power lift lever backward. When the desired height is reached, release the lever and it will return to the "hold" position. To lower a front mounted attachment, push the lever to the front, then release when desired depth is reached.

A rear mounted attachment is raised by pushing forward on the lever and is lowered by pulling the lever backward.

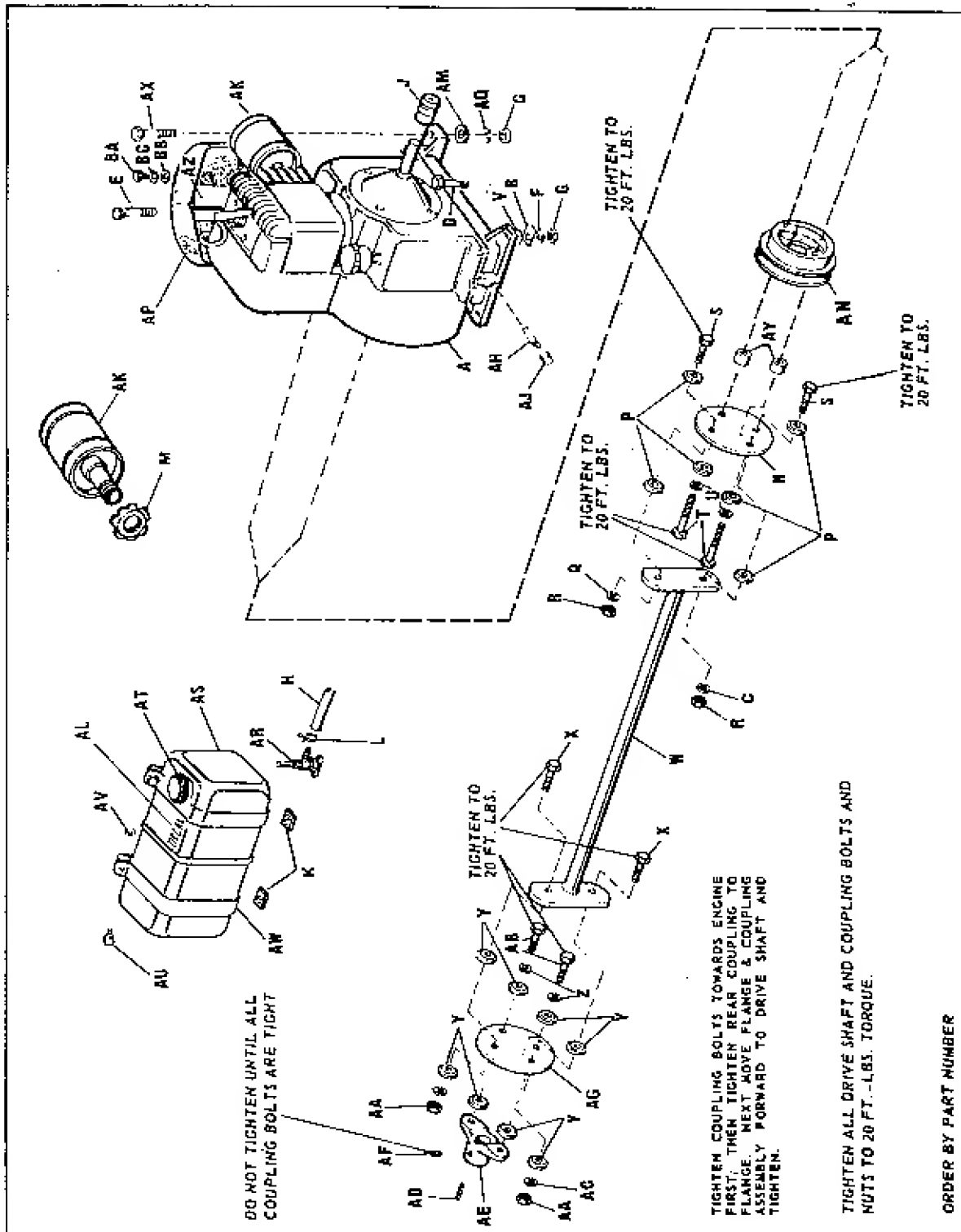
The index tabs at each end of the quadrant serve as lock points for the "float" position which allows an attachment such as a dozer blade, grader blade or snow thrower to follow ground contours freely.

### NOTE

The Rear Mounted Tiller Attachment should be operated only in the rear "float" position. Do not operate the tiller in the "hold" position, as difficulty will result if an obstacle is encountered. This would raise the rear wheels off the ground and propel the tractor forward at a dangerous rate. To get in or out of either "float" position, squeeze the release bar handle upward to clear the index tab.

Front mounted attachments such as the snow thrower and dozer blade may be operated with the power lift lever in the "hold" position. However, downward pressure will be exerted on the attachment thus preventing the snow thrower or blade from following the contour of the ground.

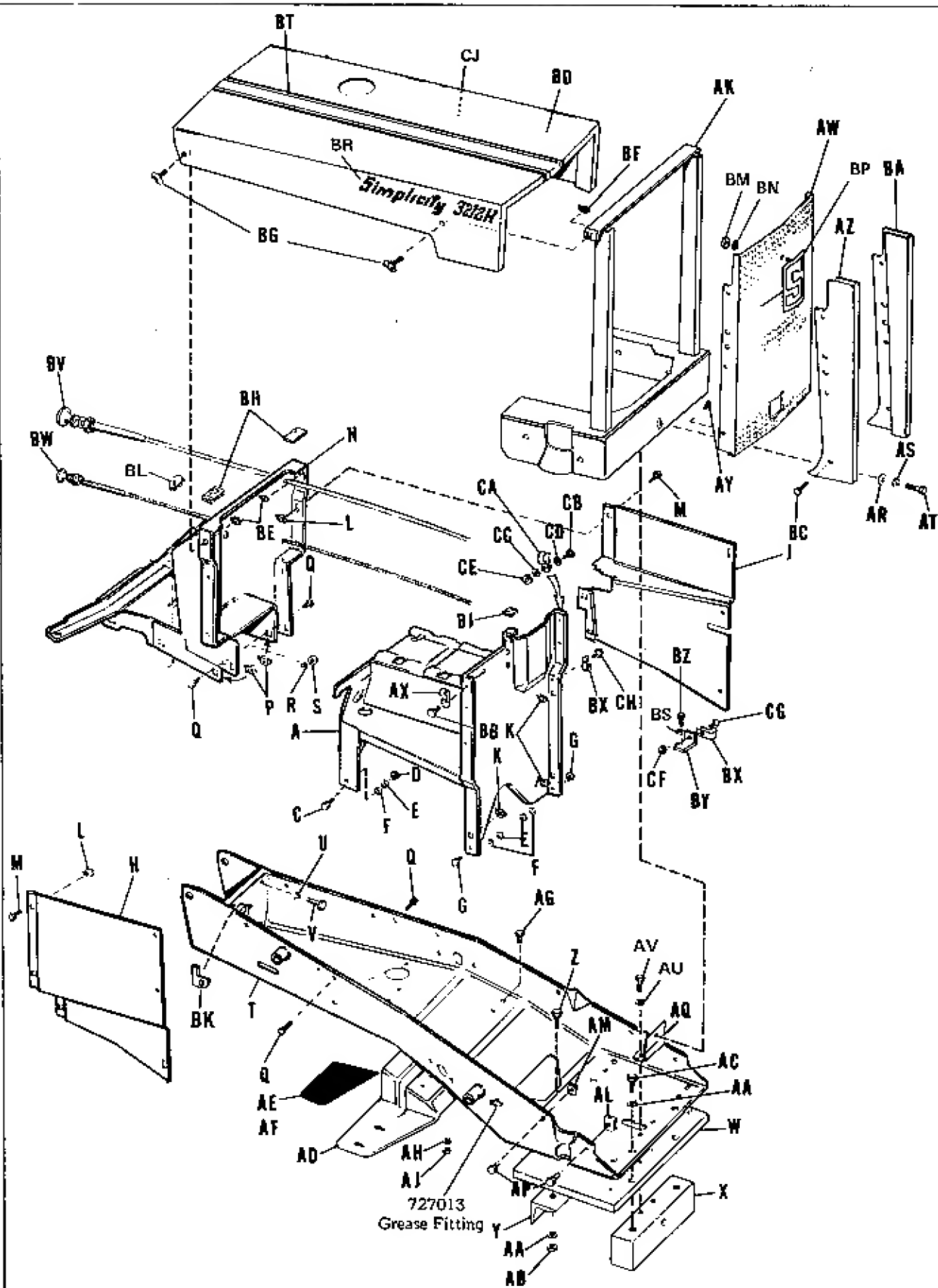
## ENGINE AND DRIVE SHAFT



## ENGINE AND DRIVE SHAFT

Ref. Let.	Part No.	Description	Ref. Let.	Part No.	Description
A		Engine, Briggs & Stratton	AC	720002	Lock Washer, 3/8"
B	157144	Stop Axle	AD	157427	Key
C	720002	Lock Washer, 3/8"	AE	154198	Drive Shaft Flange
D	705010	Hex. Cap Screw, 3/8"-16 x 1 3/4"	AF	715049	Cup Point Socket Head Set Screw, 3/8"-24 x 3/8"
E	170277	Rect. Hd. Screw	AG	157422	Coupling
F	720002	Lock Washer, 3/8"	AH	157497	Pipe Nipple, 3/8" x 1" Lg.
G	717003	Full Hex. Nut, 3/8"-16	AJ	726501	Pipe Cap, 3/8"
H	157316	Fuel Hose (Flexible)	AK	157634	Exhaust Muffler
J	154327	Crankshaft Extension Guard	AL	157096	Decal, Fuel Tank
K	106582	Felt Pad	AM	719001	Plain Washer, 3/8"
L	154372	Hose Clamp (For Service Only)	AN	164282	Pulley
M	154378	Lock Nut	AP	157131	Film, Air Cleaner
N	157422	Coupling	AQ	720002	Lock Washer, 3/8"
P	157424	Special Washer	AR	156176	Shut-Off Valve
Q	720002	Lock Washer, 3/8"	AS	157006	Fuel Tank
R	717003	Full Hex. Nut, 3/8"-16	AT	156175	Fuel Tank Cap
S	705016	Hex. Cap Screw, 3/8"-16 x 1 1/4" Lg.	AU	705053	Hex. Hd. Cap Screw, 1/4"-20 x 1 3/4"
T	715043	Hex. Cap Screw, 3/8"-16 x 2 1/2" Lg.	AV	717005	Full Hex. Nut, 1/4"-20
U	720002	Lock Washer, 3/8"	AW	162060	Tank Strap
V	719001	Plain Washer, 3/8"	AX	705006	Hex. Hd. Capscrew, 3/8"-16 x 2" Lg.
W	157016	Drive Shaft Assembly	AY	157081	Spacer
X	705016	Hex. Cap Screw, 3/8"-16 x 1 1/4"	AZ	157126	Air Cleaner Spacer
Y	157424	Special Washer	BA	715018	Hex. Hd. Cap Screw, 1/4"-20 x 5/8"
Z	720002	Lock Washer, 3/8"	BB	719006	Plain Washer, 1/4"
AA	717003	Full Hex. Nut, 3/8"-16	BC	720003	Lock Washer, 1/4"
AB	705016	Hex. Cap Screw, 3/8"-16 x 1 1/4"			

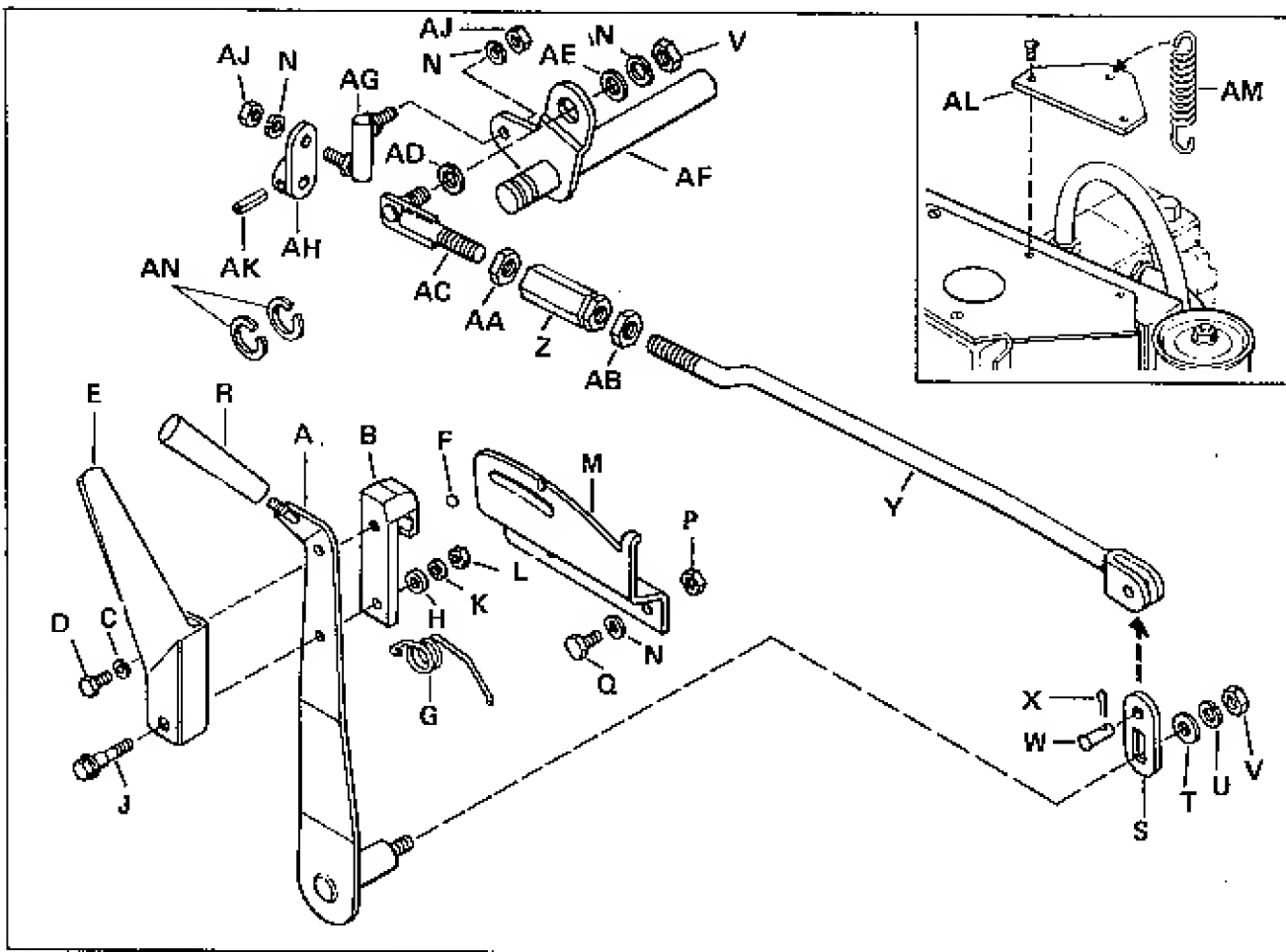
### FRAME, HOOD, GRILL, & INST. PANEL



## FRAME, HOOD, GRILL, & INST. PANEL

Ref. Let.	Part No.	Description	Ref. Let.	Part No.	Description
A	164003	Support Assembly, Fuel Tank & Battery	AU	720001	Lock Washer, 5/16"
C	705019	Hex. Cap Screw, 5/16"-18 x 1 1/4"	AV	705018	Hex. Cap Screw, 5/16"-18 x 1 1/2"
D	717511	Full Lock Hex. Nut, 5/16"-18	AW	164009	Grille
E	717001	Full Hex. Nut, 5/16"-18	AX	122195	Clamp
F	720001	Lock Washer, 5/16"	AY	714003	Self Tapping Screw, No. 10 x 1/2"
G	705012	Hex. Cap Screw, 5/16"-18 x 5/8"	AZ	164028	R.H. Side Plate
H	164014	R.H. Side Panel	BA	164027	L.H. Side Plate
J	164013	L.H. Side Panel	BB	714005	Self-Tapping Screw No. 10-24 x 1/2"
K	718032	Nut Retainer	BC	714003	Self Tapping Screw No. 10 x 1/2"
L	718043	Nut Retainer	BD	164011	Hood
M	715018	Hex. Cap Screw, 1/4"-20 x 5/8"	BE	718041	Nut Retainer (Rear)
N	164232	Inst. Panel Assembly	BF	718024	Nut Retainer (Front)
P	718032	Nut Retainer (Frame Cover)	BG	715037	Thumb Screw
Q	715098	Hex. Cap Screw, 1/4"-20 x 1/2"	BH	164120	Felt Pad
R	720003	Lock Washer, 1/4"	BJ	164121	Felt Pad
S	717005	Full Hex. Nut, 1/4"-20	BK	166200	Rod Guide
T	164010	Frame Assembly	BL	164191	Plug Button
U	720006	Lock Washer, 7/16"	BM	717023	Hex Nut 10-24
V	705039	Hex. Cap Screw, 7/16"-14 x 1 1/2"	BN	720007	Lock Washer
W	157057	Base Weight	BP	164137	Emblem "S"
X	157060	Front Support, 1 3/4" x 2 1/2" x 8 5/8"	BQ	164135	Plate, Assy.
Y	157482	Angle Assembly (Frame Rear)	BR	166201	Simplicity & Number 3212 Film (R.H.)
Z	715080	Hex. Cap Screw, 7/16"-14 x 1 1/2"	BS	720003	Lock Washer, 1/4"
AA	720006	Lock Washer, 7/16"	BT	164129	Hood Strip
AB	717022	Full Hex. Nut, 7/16"-14	BU	715018	Hex. Cap Screw, 1/4"-20 x 5/8"
AC	706003	Hex. Cap Screw, 7/16"-20 x 1 1/2"	BV	164042	Throttle Control
AD	157065	Foot Rest	BW	164019	Choke Control
AE	157080	L.H. Foot Rest Pad	BX	158475	Bowden Wire Clip
AF	157089	R.H. Foot Rest Pad	BY	157315	Throttle Cable Bracket
AG	705004	Hex. Cap Screw, 3/8"-16 x 3/4"	BZ	714021	Self Tapping Screw, 1/4"-20 x 5/8"
AH	720002	Lock Washer, 3/8"	CA	122186	Clamp
AJ	717003	Full Hex. Nut, 3/8"-16	CB	705015	Hex. Cap Screw, 1/4"-20 x 5/8"
AK	164008	Cover & Tube Assembly	CC	720003	Lock Washer, 1/4"
AL	718022	Retainer Nut (Front)	CD	719006	Plain Washer, 1/4"
AM	718030	Retainer Nut, (Rear)	CE	717005	Full Hex. Nut, 1/4"-20
AP	715082	Hex Screw, Whiz-Lock Flange, 5/16"-18 x 3/4"	CF	717007	Full Hex. Nut, 10-32
AQ	157488	Bracket Assembly	CG	710004	Mach. Rd. Hd. Screw, 10-32 x 3/8"
AR	719002	Plain Washer, 5/16"	CH	714005	Self Tapping Rd. Hd. Screw, 10-24 x 1/2"
AS	720001	Lock Washer, 5/16"	CJ	166202	Simplicity & Number 3212 Film (L.H.)
AT	705019	Hex. Cap Screw, 5/16"-18 x 1 1/4"			

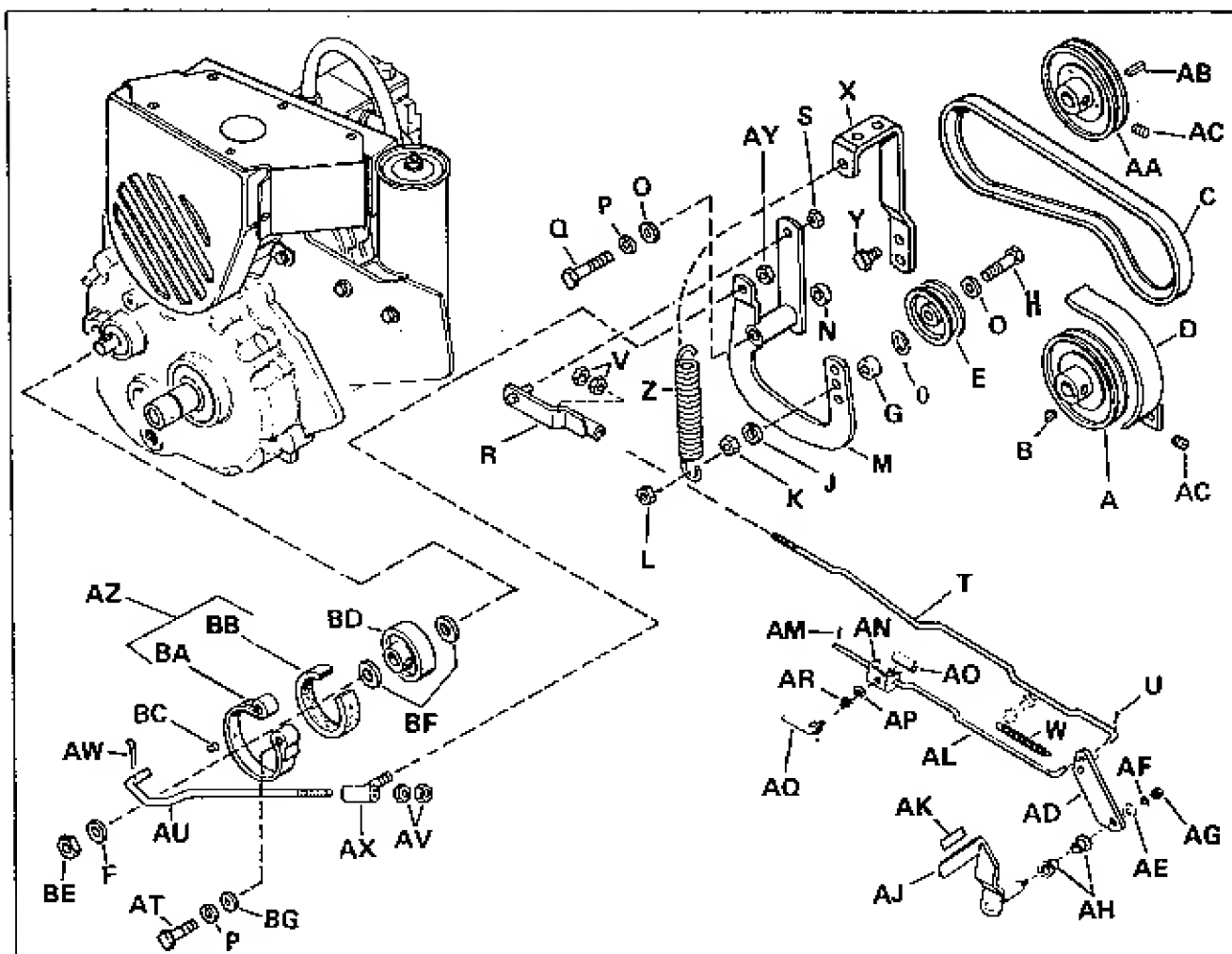
# HYDROSTATIC CONTROL GROUP



Ref. Let.	Part No.	Description
A	166036	Lever Assembly
B	166038	Stop Clamp
C	720003	Lock Washer, 1/4" Std.
D	705002	Hex Capscrew, 1/4"-20 N.C. x 1/2"
E	166050	Handle
F	166178	Shift Ball Handle, 5/16"
G	166047	Spring
H	166063	Spacer
J	166051	Shoulder Bolt
K	719006	Plain Washer, 1/4"
L	717513	Full Hex Lock Nut, 1/4"- 20
M	166087	Support Plate
N	720001	Lock Washer, 5/16"
P	717001	Full Hex Nut, 5/16"-18
Q	705012	Hex Capscrew, 5/16"-18 N.C.x 5/8"
R	164180	Handle
S	164123	Link,
T	719001	Plain Washer, 3/8"

Ref. Let.	Part No.	Description
U	720002	Lock Washer, 3/8"
V	717003	Full Hex Nut, 3/8"-16
W	153058	Pin
X	722001	Cotter Pin, 3/32" x 3/4"
Y	166083	Rod Assy., Control, Front
Z	166088	Turn Buckle
AA	718046	Full Hex Nut, 7/16"-14 L.H.
AB	717022	Full Hex Nut, 7/16"-14 R.H.
AC	166089	Rod Assy., Rear Control
AD	166078	Spacer
AE	719002	Plain Washer, 5/16"
AF	166095	Shaft Assy., Control
AG	166079	Ball Joint, Double End
AH	166092	Link Assy., Control
AJ	717002	Full Hex Nut, 5/16"-24
AK	723008	Roll Pin, 1/4" x 1-1/4"
AL	166160	Spring Clip,
AM	107135	Spring
AN	118240	Retaining Ring

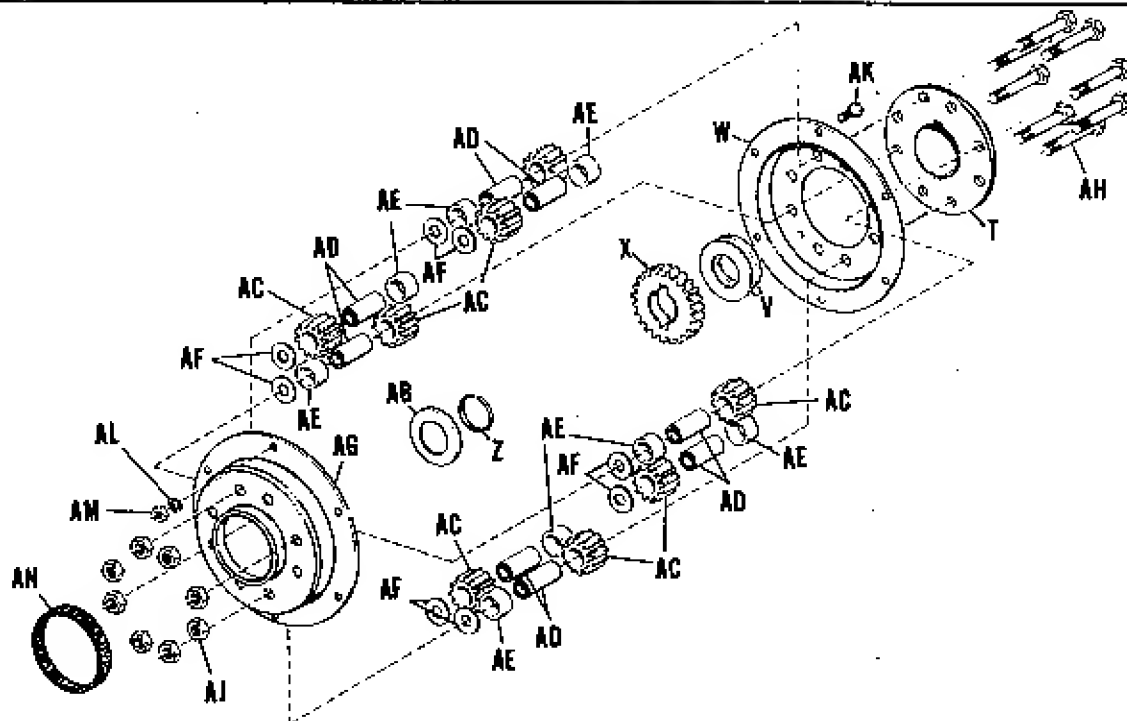
# CLUTCH AND BRAKE GROUP



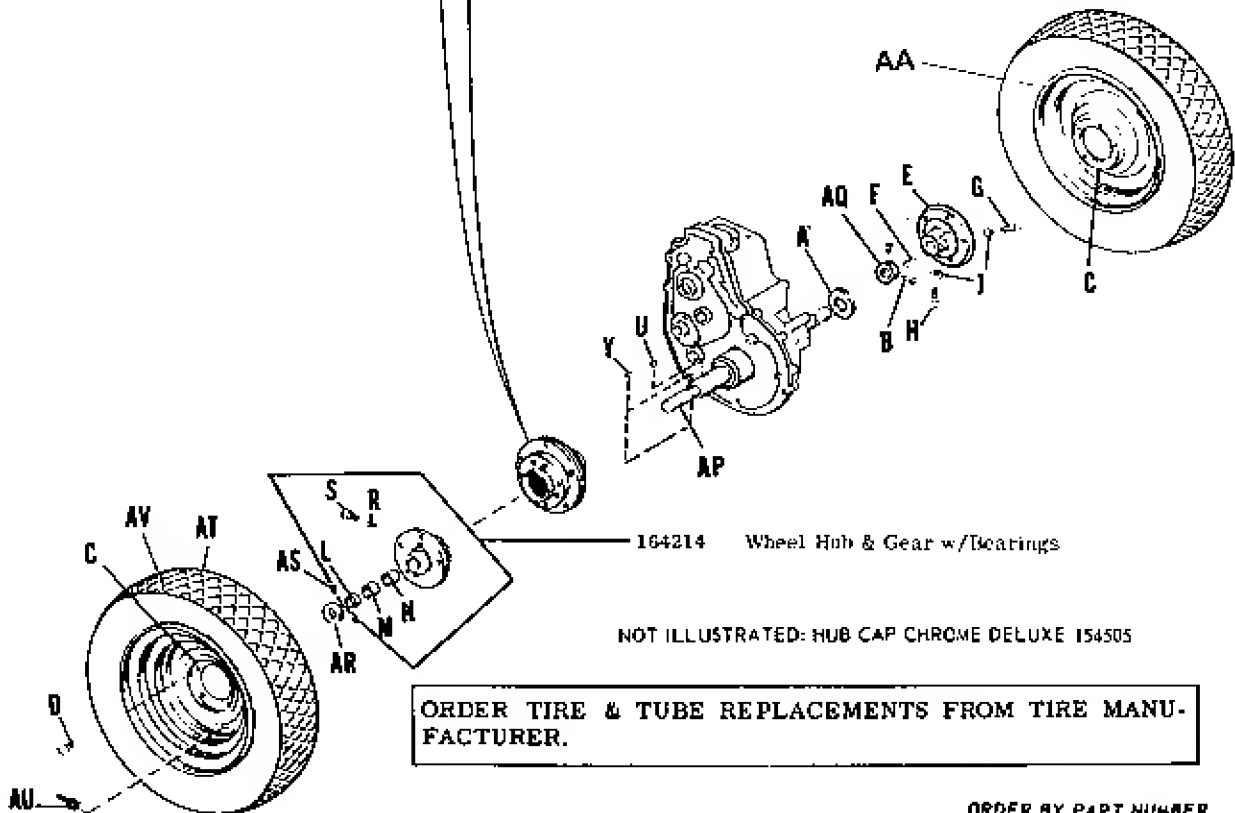
Ref. Let.	Part No.	Description
A	154308	Driver Pulley
B	725003	Woodruff Key, 3/16" x 3/4"
C	166172	"V" Belt
D	166122	Belt Guard Assembly
E	164268	Idler Pulley
F	719001	Plain Washer, 3/8"
G	157081	Spacer
H	705003	Hex. Capscrew, 3/8-16 x 2-1/4" lg.
J	720002	Lock Washer, 3/8"
K	717003	Full Hex. Nut, 3/8" - 16 N.C.
L	717524	Jam Hex. Lock Nut, 3/8" - 16 N.C.
M	166126	Idler Lever Assembly
N	166130	Spacer
O	719001	Plain Washer, 3/8"
P	720002	Lock Washer, 3/8"
Q	715063	Hex. Capscrew, 7/16" - 14 x 3-3/4"
R	166157	Rod Guide Assembly
S	717511	Full Hex. Lock Nut, 5/16" - 18 N.C.
T	166131	Clutch & Brake Rod
U	722009	Cotter Pin, 1/8" x 3/4" lg.
V	717001	Full Hex. Nut, 5/16" - 18 N.C.
W	159100	Front Tension Spring
X	166156	Spring Bracket, 1/4 x 1 x 11-1/4"
Y	714027	Hex. Hd. Capscrew, 3/8 x 3/4"
Z	154359	Idler Pulley Spring
AA	166173	Driven Pulley
AB	157332	Key

Ref. Let.	Part No.	Description
AC	713503	Cup Pl. Socket Hd. Set Screw, 5/16-18 x 5/16"
AD	157300	Foot Pedal Arm, 1/4 x 1-3/4 x 5-7/8"
AE	719001	Plain Washer, 3/8"
AF	720002	Lock Washer, 3/8"
AG	717003	Full Hex. Nut, 3/8" - 16 N.C.
AH	106410	Bushing
AJ	170304	Foot Pedal Assembly
AK	162098	Pedal Pad
AL	164210	Parking Brake Rod
AM	722001	Cotter Pin, 3/32" x 3/4" lg.
AN	164143	Parking Brake Bracket Assy.
AO	157287	Spacer, 3/8"
AP	719003	Plain Washer, 7/16"
AQ	164142	Parking Brake Lock
AR	157127	Control Spring
AT	705010	Hex. Capscrew, 3/8" 16 x 1-3/4" lg.
AU	166058	Brake Rod
AV	717003	Full Hex. Nut, 3/8" - 16 N.C.
AW	722001	Cotter Pin, 3/32" x 3/4" lg.
AX	166119	Rod Guide Assembly
AY	717511	Full Hex. Lock Nut, 5/16" - 18 N.C.
AZ	166057	Brake Band & Lining Assembly
BA	166056	Brake Band
BB	166055	Brake Lining
BC	724502	Hivet No. 7 x 1/4" lg.
BD	166176	Brake Drum
BE	717519	Lock Nut, 7/16" - 14
BF	158198	Washer
BG	719002	Plain Washer, 3/8"

# 



ASSEMBLY - 157471





## REAR WHEELS AND AXLE

Ref. Let.	Part No.	Description
A	105050	Washer
B	713002	Set Screw, 5/16"-18 x 3/8" Lg.
C	170278	Wheel Drive
D	121138	Hub Bolt
E	154208	L.H. Wheel Hub
F	159129	Key
G	715022	Set Screw, 3/8"-16 x 1 1/2" Lg.
H	713004	Set Screw 3/8"-16 x 1" Lg.
J	717021	Hex. Jam Nut, 3/8"-16
L	105058	Bearing
M	152041	Nylon Bearing
N	153068	Bearing
R	152042	Nylon Plug
S	713508	Control Traction Bolt, 7/16"-20 x 1/2" Lg.
T	164217	Differential Carrier
U	157120	Drive Key
V	154035	Axle Washer
W	164218*	Differential Cover
X	164219	Differential Gear
Y	725501	Hi-Pro Key
Z	154291	Retaining Ring
AA	157638	Tube (For Service Only)
AB	154277	Axle Washer
AC	121311	Differential Pinion
AD	121083	Pinion Differential Spindle
AE	121084	Differential Spacer
AF	719002	Plain Washer
AG	164220*	Differential Cover
AH	715043	Hex. Cap Screw, 3/8"-16 x 2 1/2"
AJ	717510	Full Lock Hex. Nut, 3/8"-16
AK	705015	Hex. Cap Screw, 1/4"-20 x 5/8"
AL	720003	Lock Washer, 1/4"
AM	717005	Full Hex. Nut, 1/4"-20
AN	121190	Differential Cover Seal
AP	164221	Rear Axle
AQ	154065	Axle Collar
AR	154065	Axle Collar
AS	713002	Set Screw, 5/16"-18 x 3/8"
AT	157637	Tire 10 1/2" x 12
AU	157029	Valve Stem
AV	170280	Wheel & Tire Assy.

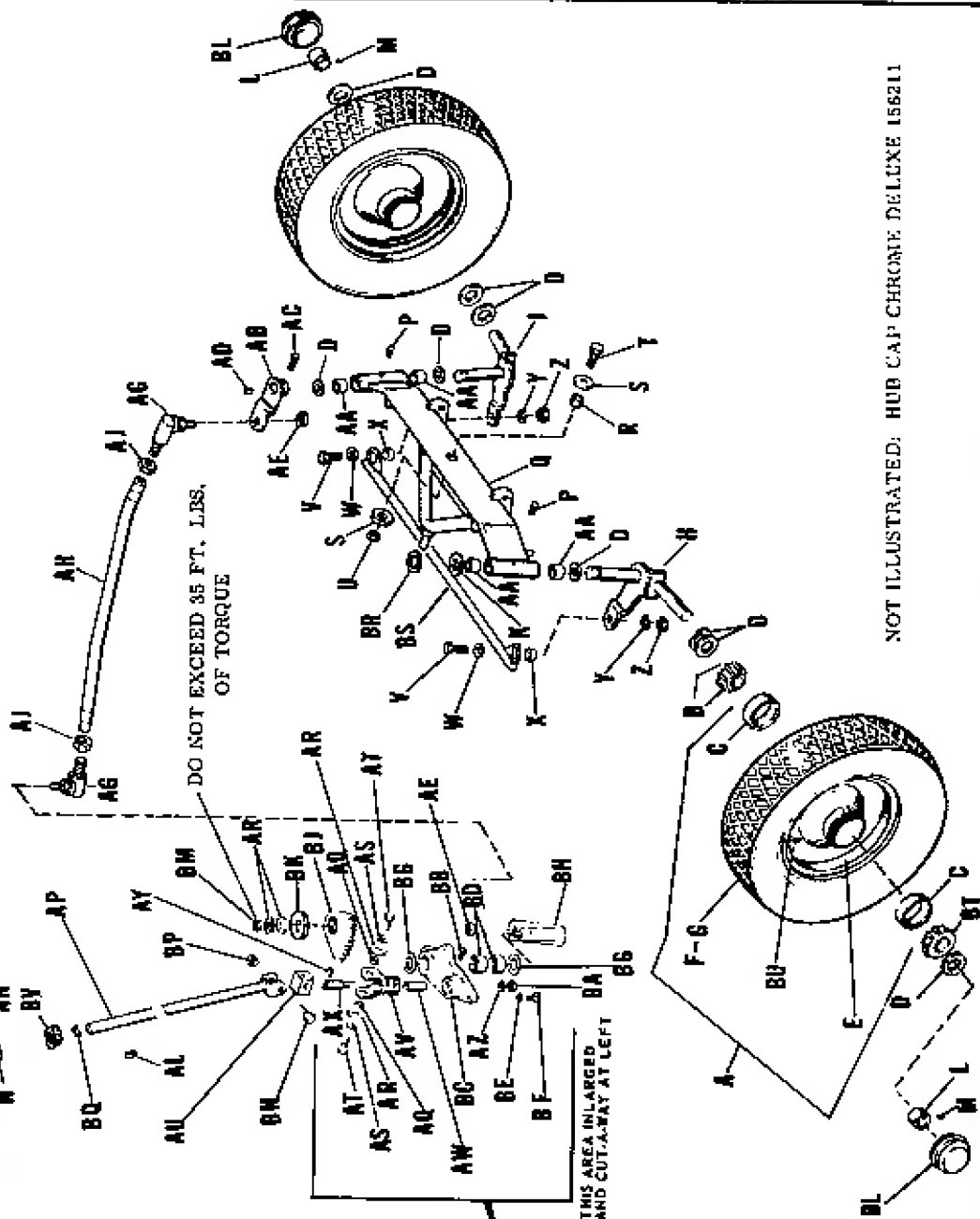
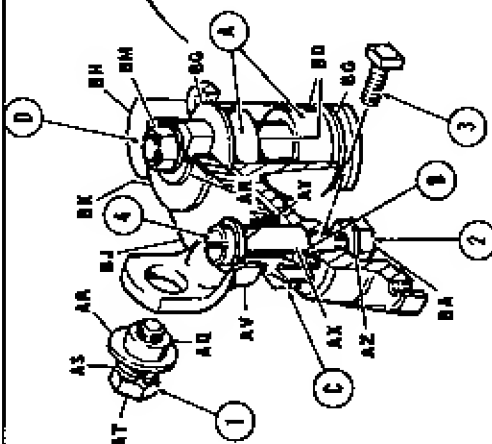
### CAUTION

DO NOT EXCEED 25ft. POUNDS OF TORQUE ON PART NUMBER 713508,  
REFERENCE LETTER (S), CONTROL TRACTION BOLTS.

\* Reference letters "W" and "AG" must be replaced in pairs.

# STEERING GEAR CLEARANCE ADJUSTMENT

- A. Remove R.H. Side Panel.
  - B. Remove Capscrew (No. 1) from Steering Shaft and move out of the way.
  - C. Loosen Hex. Nut (No. 2).
  - D. Loosen Set Screw (No. 3).
  - E. Turn Eccentric Pin (No. 4) until the Pinion and Steering Gear are in a position that permits minimum backlash. Be sure that the Gears are not meshed to tight that it interferes with steering.
  - F. Tighten the Hex. Nut (No. 2) and Set Screw (No. 3).
  - G. Replace the Capscrews (No. 1) and R.H. Side Panel.
  - H. Grease Needle Bearings, (A) Bushing (B) and Gear Teeth (C) before reassembly.
- To grease Needle Bearings (A) remove attaching hardware (D) and remove Steering Arm Assembly.



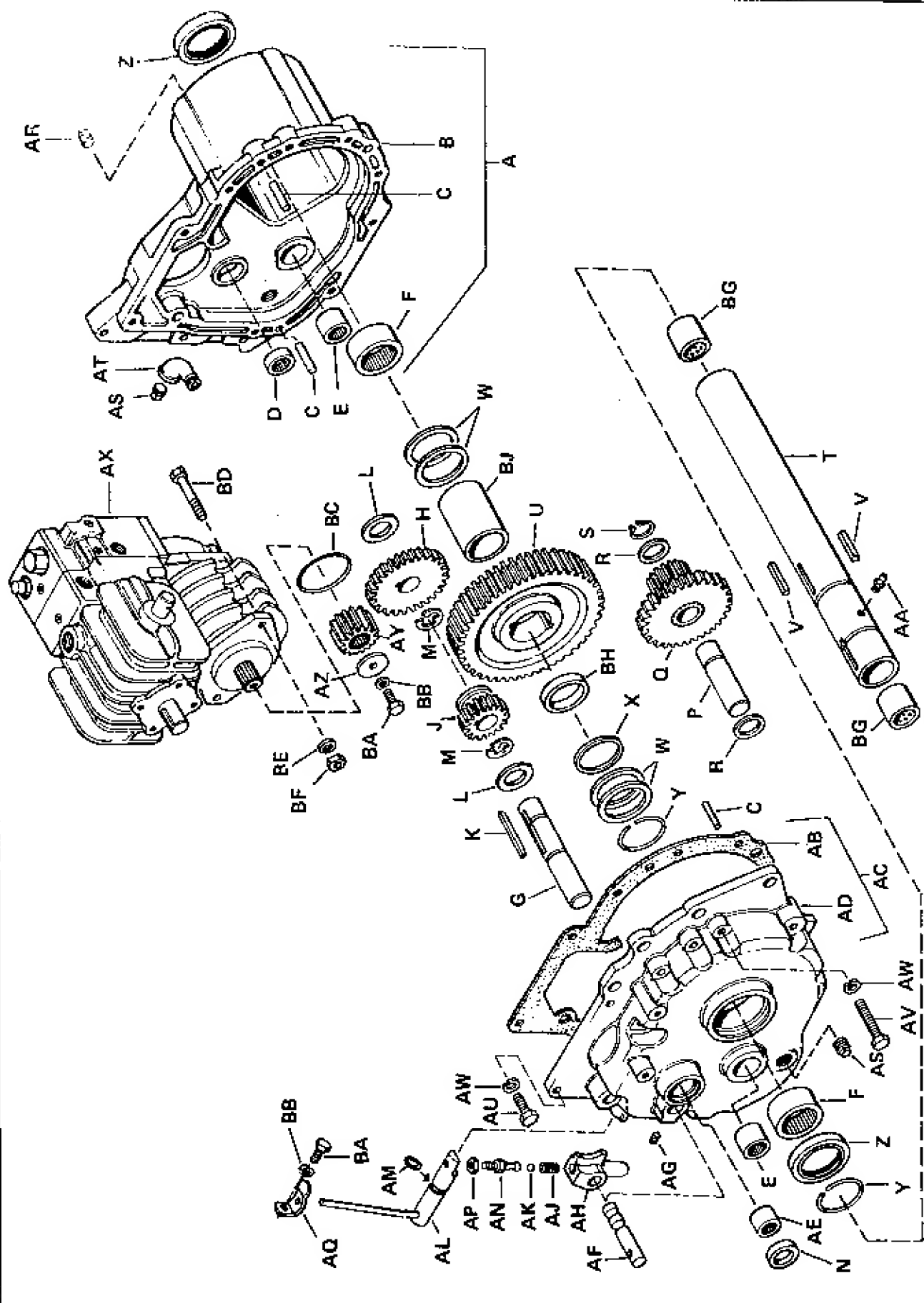
NOT ILLUSTRATED: HUB CAP CHROME DELUXE 156211

ORDER BY PART NUMBER

## FRONT WHEELS, AXLE, TIE ROD & STEERING

## FRONT WHEELS, AXLE, TIE ROD & STEERING

Ref. Let.	Part No.	Description	Ref. Let.	Part No.	Description
A	157505	Wheel and Tire Assembly	AM	713503	Socket Head Cup Point Set Screw, 5/16"-18 x 5/16" Lg.
B	154397	Bearing Cone w/seal	AN	713502	Socket Head Set Screw, 5/16"-18 x 1/4" Lg.
C	154393	Bearing Cup	AP	157259	Steering Shaft Assembly
D	108181	Washer	AQ	153081	Spacer
E	157506	Wheel w/Bearing Cup	AR	719001	Plain Washer, 3/8"
F	157490	Tire	AS	720002	Lock Washer, 3/8"
G	153038	Tube	AT	715030	Hex. Cap Screw, 3/8"-16 x 3/4" Lg.
H	157494	Spindle Assembly, R.H.	AU	154153	Universal Joint Pin
J	157611	Spindle Assembly, L.H.	AV	157254	Bushing Assembly
K	8061012	Washer	AW	157258	Bushing
L	8021010	Set Collar	AX	157253	Pin Eccentric
M	713503	Cup Point Socket Head Set Screw, 5/16"-18 x 5/16" Lg.	AY	158399	Retainer Ring
N	8021010	Set Collar	AZ	720002	Lock Washer
P	727001	Grease Fitting	BA	717003	Full Hex. Nut, 3/8"-16
Q	157616	Axle Assembly, Front	BB	713012	Sq. Hd. Set Screw, 1/4"-20 x 3/4"
R	157618	Spacer	BC	157302	Steering Bracket
S	719004	Plain Washer, 1/2"	BD	154258	Needle Bearing
T	705037	Hex. Cap Screw, 1/2"-13 x 1" Lg.	BE	720001	Lock Washer, 5/16"
U	717518	Full Lock Hex. Nut, 1/2"-13	BF	705012	Hex. Cap Screw, 5/16"-18 x 5/8"
V	705016	Hex. Cap Screw, 3/8"-16 x 1 1/4" Lg.	BG	8061012	Washer
W	719001	Plain Washer, 3/8"	BH	164263	Steering Arm Assembly
X	154177	Spacer	BJ	164235	Gear Steering
Y	720002	Lock Washer, 3/8"	BK	108182	Arbor Washer
Z	717003	Full Hex. Nut, 3/8"-16	BL	154487	Hub Cap
AA	154289	Bearing	BM	717519	Gripco Center Lock 7/16"-14
AB	157613	Arm Assembly, Steering, L.H.	BN	715026	Hex Cap Screw
AC	713006	Screw, Set Cup Point, Square Head, 5/16"-18 x 1/2" Lg.	BP	717511	Full Hex. Nut, 5/16"-18
AD	157427	Key	BQ	154264	Snap Ring
AE	717528	Full Hex. Lock Nut, 1/2"-20	BR	157286	Retaining Ring
AG	154272	Ball Joint	BS	157499	Drag Link
AH	164271	Tie Rod	BT	154486	Outside Bearing
AJ	717016	Nut, 1/2"-20 N.F.	BU	157305	Valve Stem
AK	157702	Steering Wheel	BV	157077	Steering Bushing
AL	725003	Woodruff Key No. 9			

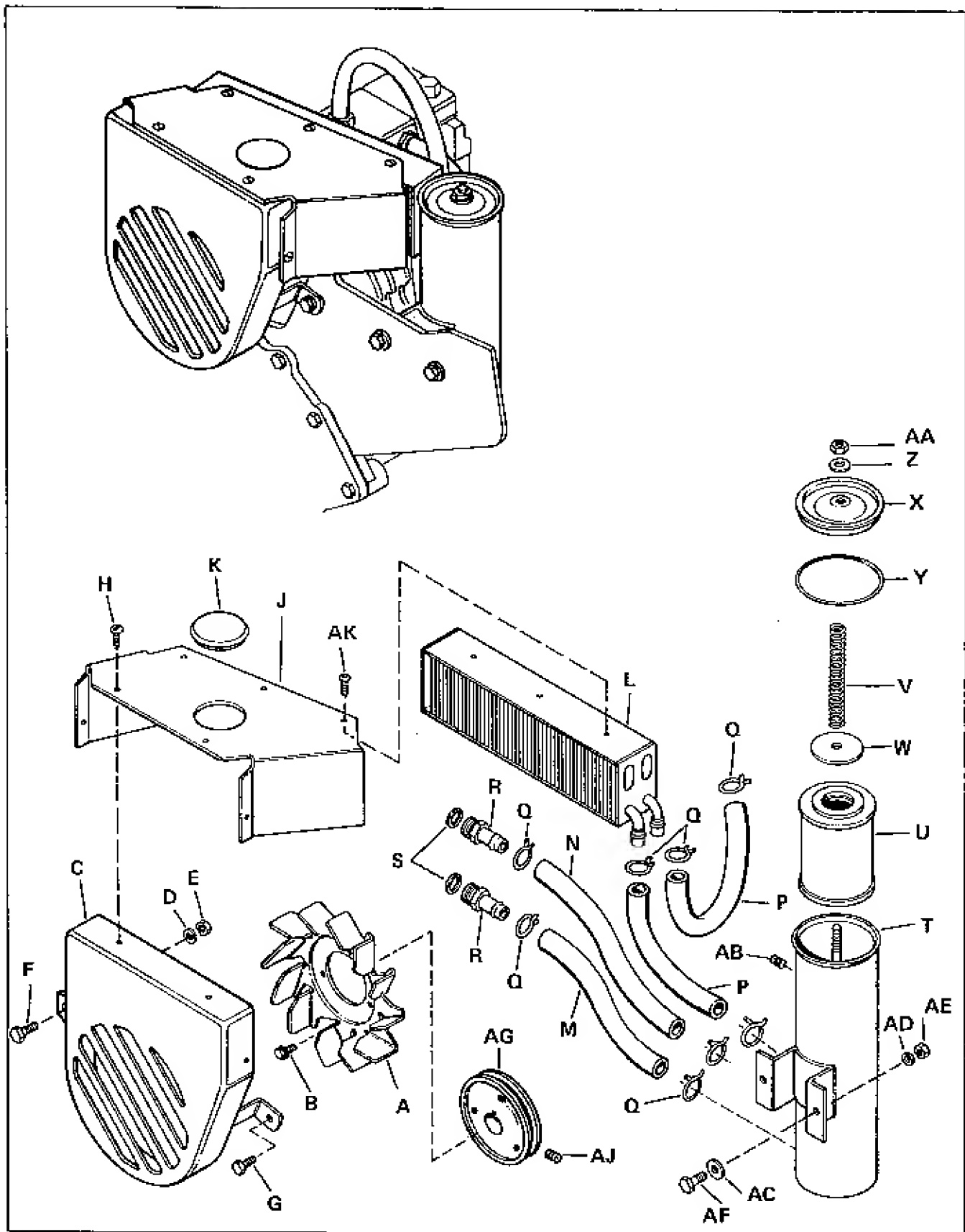


**TRANSMISSION GROUP**

## TRANSMISSION GROUP

Ref. Let.	Part No.	Description	Ref. Let.	Part No.	Description
A	166105	Gear Case Complete (includes B thru F)	AE	166019	Needle Bearing
B	166001	Gear Case	AF	166028	Shifter Shaft
C	723018	Roll Pin, 3/8" x 1-1/4"	AG	715019	Cone Pt. Setscrew, Hollow Hd., 5/16"-18 x 1/2"
D	154271	Needle Bearing	AH	166027	Shift Fork
E	166018	Needle Bearing	AJ	154323	Spring
F	157519	Needle Bearing	AK	154262	Shift Lock Ball
G	166011	Brake Shaft	AL	166164	Shift. Shaft Assembly
H	166004	Gear - 1st Interm.	AM	166023	"O" Ring
J	166005	Sliding Pinion	AN	166029	Shift Stem
K	166014	Key	AP	717029	Hex. Jam Nut, 5/16"-24
L	166013	Washer	AQ	166162	Lift Lever Latch
M	166015	Retainer Ring	AR	726002	Pipe Plug, 1/4"
N	166021	Oil Seal	AS	726003	Pipe Plug, 3/8"
P	166012	Shaft, Interm.	AT	728501	Street Elbow, 3/8"
Q	166010	Pinion & Gear Assembly	AU	705007	Hex. Capscrew, 5/16-18 x 1"
R	166016	Washer	AV	705020	Hex. Capscrew, 5/16-18 x 2"
S	166017	Retaining Ring	AW	720001	Lock Washer, 5/16"
T	166066	Axle Tube Assembly	AX	166097	Hydrostatic Pump & Motor Unit
U	166006	Drive Gear	AY	166003	Motor Shaft Pinion
V	154096	Key	AZ	123144	Washer
W	154097	Washer	BA	715088	Hex. Capscrew, 5/16-24 x 5/8"
X	166167	Washer	BB	720001	Lock Washer, 5/16"
Y	154268	Snap Ring	BC	166026	"O" Ring
Z	154269	Seal	BD	715064	Hex. Capscrew, 7/16-14 x 4"
AA	727002	Grease Fitting	BE	720006	Lock Washer, 7/16"
AB	166043	Gear Case Gasket	BF	717022	Hex. Nut, Full, 7/16"-14
AC	166103	Gear Case Cover Sub. Assy. (includes AD, AE, E, F)	BG	164224	Bushing
AD	166002	Gear Case Cover	BH	166040	Spacer (R.H.Side)
			BJ	166041	Spacer (L.H.Side)

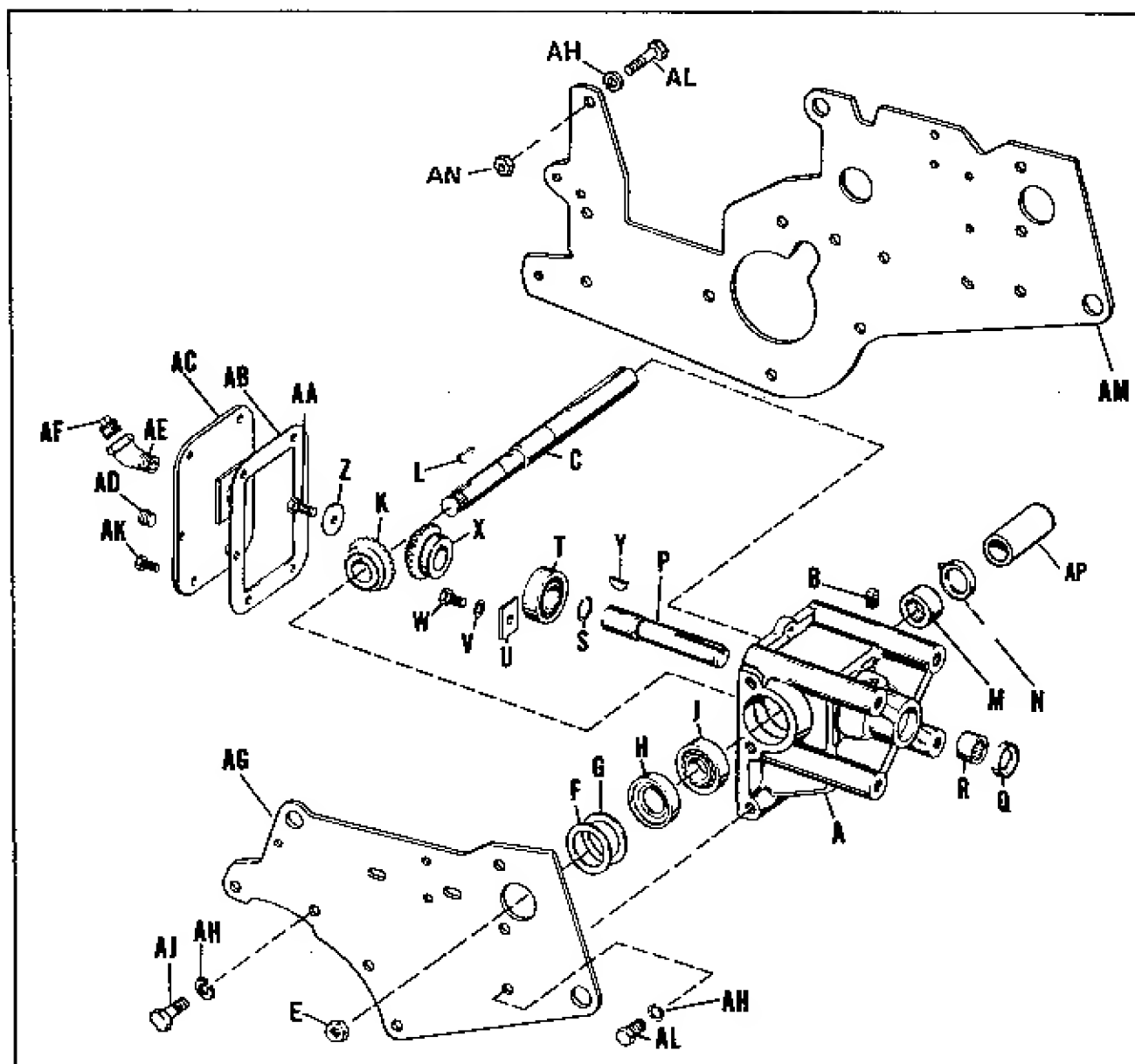
# HYDROSTATIC COOLING GROUP



## HYDROSTATIC COOLING GROUP

Ref. Let.	Part No.	Description
A	166022	Pulley Fan
B	715090	Hex. Screw, Washer Hd.
C	166114	Fan Shroud Assembly
D	720001	Lock Washer, 5/16"
E	717001	Full Hex. Nut 5/16"-18
F	705017	Hex. Capscrew 5/16-18 x 3/4"
G	714026	Hex. Screw, Thd.
H	714004	Tapscrew, Round hd. slot 3/8"
J	166134	Cooler Deflector
K	166165	Caplug
L	166135	Oil Cooler
M	166136	Hydraulic Hose
N	166137	Hydraulic Hose
P	166138	Hydraulic Hose
Q	166044	Hose Clamp
R	166139	Beaded Insert
S	166024	"O" Ring
T	166140	Reservoir Assembly
U	166147	Filter Element
V	166171	Spring
W	166150	Washer
X	166080	Reservoir Cover
Y	166020	"O" Ring
Z	166161	Nylon Washer
AA	717525	Elastic Stop Nut 5/16" - 18
AB	726253	Pipe Plug 1/4"
AC	719002	Plain Washer, 5/16"
AD	720001	Lock Washer, 5/16"
AE	717001	Full Hex. Nut, 5/16 - 18"
AF	705017	Hex. Capscrew, 5/16-18 x 3/4"
AG	166173	Driven Pulley
AJ	713503	Cup Pt. Socket Hd. Set Screw, 5/16-18 x 5/16"
AK	710002	Rd. Hd. Mach Screw No. 10-32 x 1/2" lg.

# BEVEL GEAR HOUSING

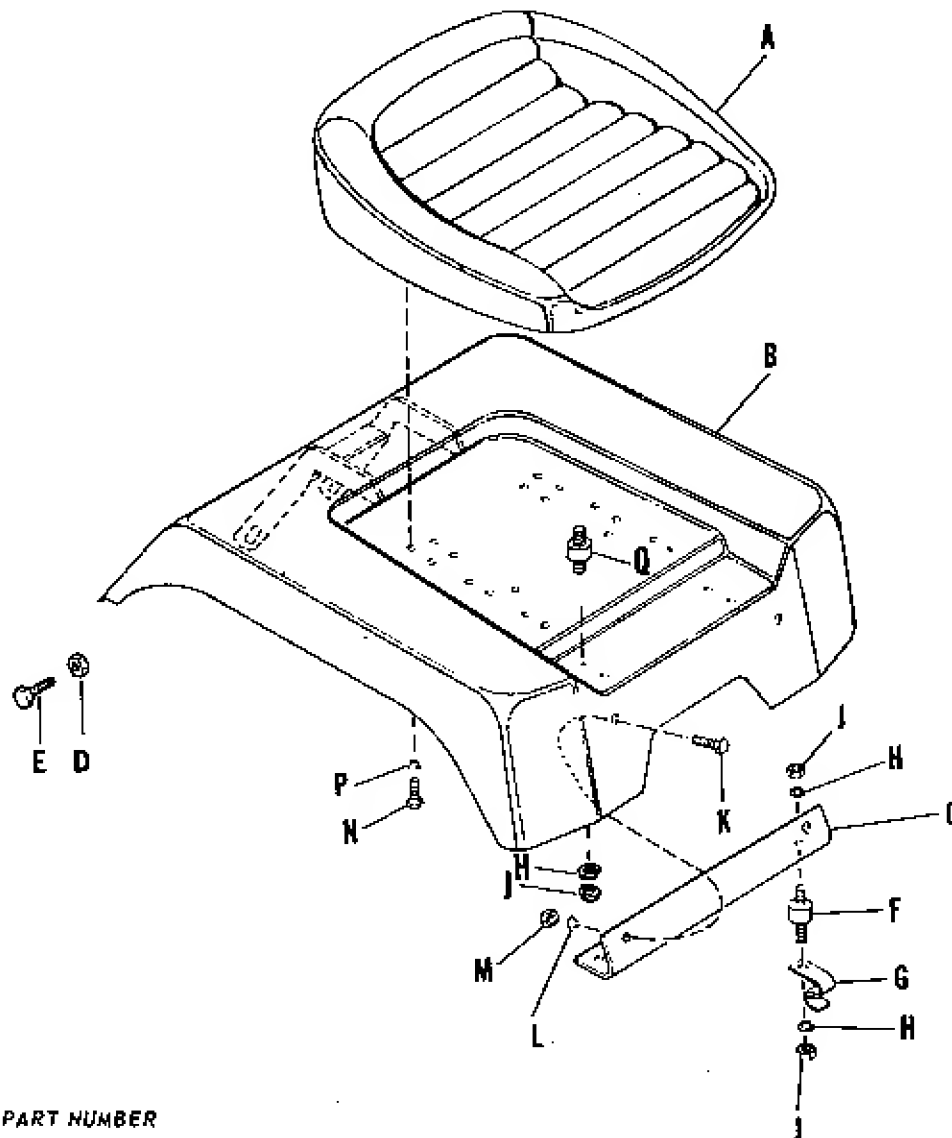


Ref. Let.	Part No.	Description
A	154062	Bevel Gear Housing, W/Bearings
B	154326	Pipe Plug
C	154135	Drive Shaft
E	717517	Hex Jam Nut
F	154137	Shim (As Required)
G	154138	Shim
H	157869	Oil Seal
J	118011	Ball Bearing
K	154139	Bevel Driven Gear
L	725003	Key
M	154279	Needle Bearing
N	118117	Oil Seal
P	157426	Driven Shaft
Q	154263	Oil Seal
R	154258	Needle Bearing
S	118134	Retaining Ring
T	118011	Ball Bearing
U	154040	Bearing Clamp Plate
V	720001	Lock Washer, 5/16"

Ref. No.	Part No.	Description
W	705012	Hex Capscrew, 5/16"-18 x 5/8" lg.
X	154121	Bevel Driven Gear
Y	725003	Key
Z	154028	Washer
AA	154281	Hex Capscrew, 5/16"-18 x 3/4" lg.
AB	154282	Gasket
AC	164249	Housing Cover Assembly
AD	726002	Pipe Plug
AE	728501	Street Elbow
AF	726003	Pipe Plug
AG	166049	R. H. Side Plate
AH	720006	Lock Washer, 7/16"
AJ	705041	Hex Cap Screw, 7/16"-14 x 1" lg.
AK	707003	Hex Cap Screw, 1/4"-20 x 5/8" lg.
AL	705042	Hex Capscrew, 7/16"-14 x 1-1/4" lg.
AM	166054	L. H. Side Plate
AN	717022	Full Hex Nut, 7/16"-14
AP	166077	Spacer



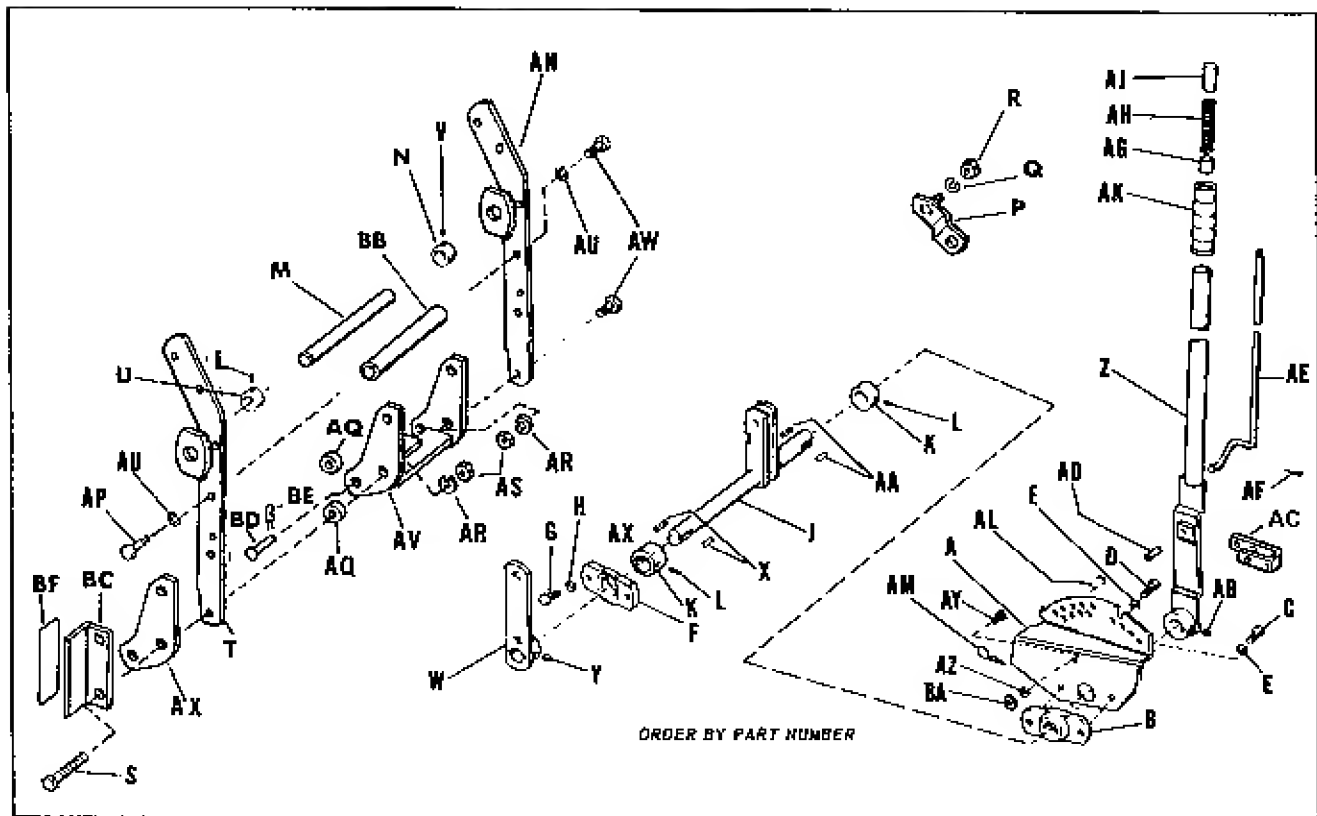
## SEAT AND FENDERS



ORDER BY PART NUMBER

Ref. Let.	Part No.	Description
A	156203	Seat Assembly
B	166111	Seat Deck Assembly
C	164029	Seat Deck Bracket, Front
D	717510	Hex. Locknut, Full, 3/8"-16
E	705018	Hex. Head Capscrew, 3/8"-16 x 1-1/4"
F	139045	Cushion Connector, Front
G	164145	Spring Clip
H	720001	Lock Washer, 5/16"
J	717001	Hex. Nut, Full, 5/16"-19
K	705012	Hex. Head Capscrew, 5/16"-18 x 5/8" lg.
L	720001	Lockwasher, 5/16"
M	717001	Hex. Nut, Full, 5/16"-18
N	705012	Hex. Head Capscrew, 5/16"-18 x 5/8" lg.
P	720001	Lockwasher, 5/16"
Q	157094	Cushion Connector, Front

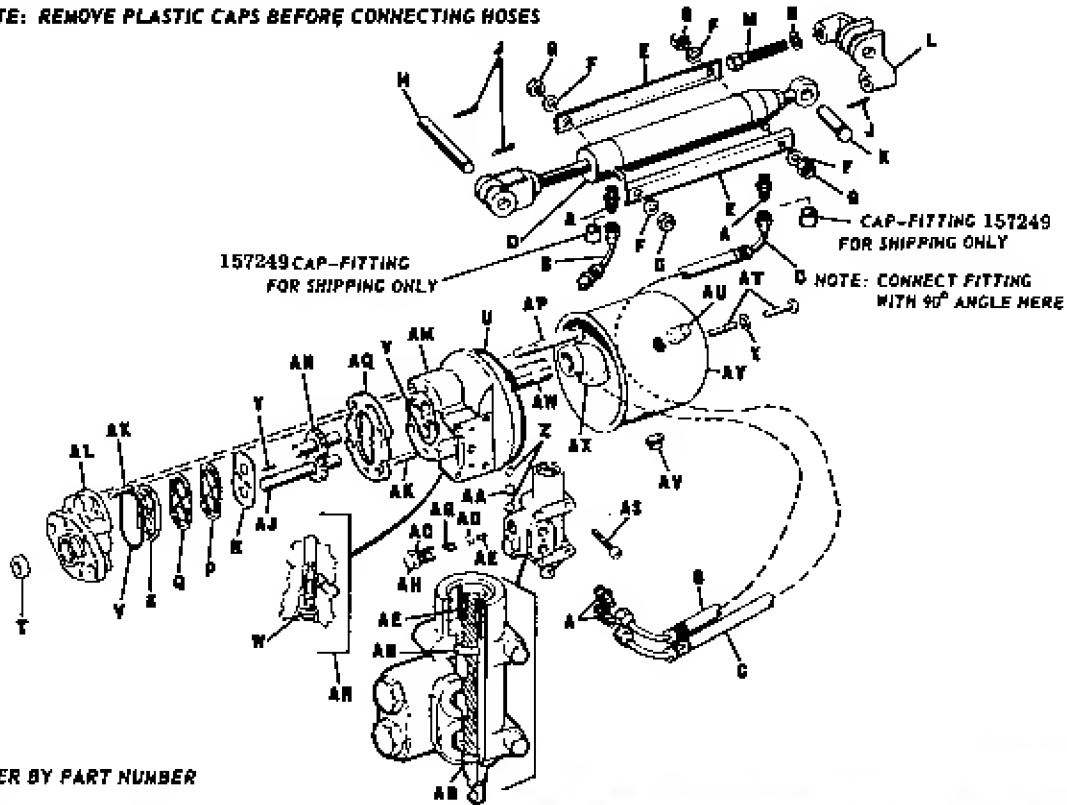
## REAR LIFT DRAW BAR GROUP



Ref. Let.	Part No.	Description	Ref. Let.	Part No.	Description
A	154209	Lift Lever Quadrant	AD	723007	Roll Pin
B	157620	Lift Lever Bearing	AE	157701	Latch Rod
C	705031	Hex. Cap Screw, 3/8"-16 x 7/8"	AF	722001	Cotter Pin, 3/32" x 3/4"
D	705016	Hex. Cap Screw, 3/8"-16 x 1 1/4"	AG	154226	Spacer
E	720002	Lock Washer, 3/8"	AH	152006	Spring
F	157620	Lift Lever Bearing	AJ	154227	Thumb Button
G	705031	Hex. Cap Screw, 3/8"-16 x 7/8"	AK	156209	Handle Grip
H	720002	Lock Washer, 3/8"	AL	153058	Pin
J	157640	Lift Shaft Assembly	AM	8161045	Spring Clip
K	157624	Set Collar	AN	166072	Arm Assembly
L	713503	Set Screw 5/16" - 18 x 5/16"	AP	705047	Hex. Cap Screw, 7/16"-14 x 1 3/4"
M	154216	Lift Shaft	AQ	166076	Spacer
N	157695	Set Collar	AR	721601	Lock Washer
P	154362	Pivot Bar Assy.	AS	717022	Full Hex. Nut, 7/16"
Q	719001	Plain Washer			
R	717510	Hex. Nut, 3/8"-16	AU	720006	Lock Washer, 7/16"
S	705069	Hex. Cap Screw, 7/16"-14 x 2 1/2"	AV	166074	Draw Bar Assembly
T	166206	Arm Assembly	AW	705042	Hex. Cap Screw, 7/16"-14 x 1 1/4"
U	8021010	Set Collar	AX	166075	Draw Plate
V	713501	Set Screw, 5/16"-18 x 1/2"	AY	715018	Hex Cap Screw, 1/4"-20 x 5/8"
W	157625	Front Lift Lever Assembly	AZ	720003	Lock Washer, 1/4"
X	157652	Key	BA	717005	Hex Nut, 1/4"-20
Y	713502	Set Screw, 5/16"-18 x 1/4"	BB	166110	Spacer
Z	157696	Lift Lever Assembly	BC	166198	Plate, Decal
AA	157120	Key	BD	155037	Round Head Pin
AB	713502	Set Screw, 5/16"-18 x 1/4"	BE	8161045	Spring Clip
AC	157700	Lift Lever Latch	BF	166197	Film, Safety

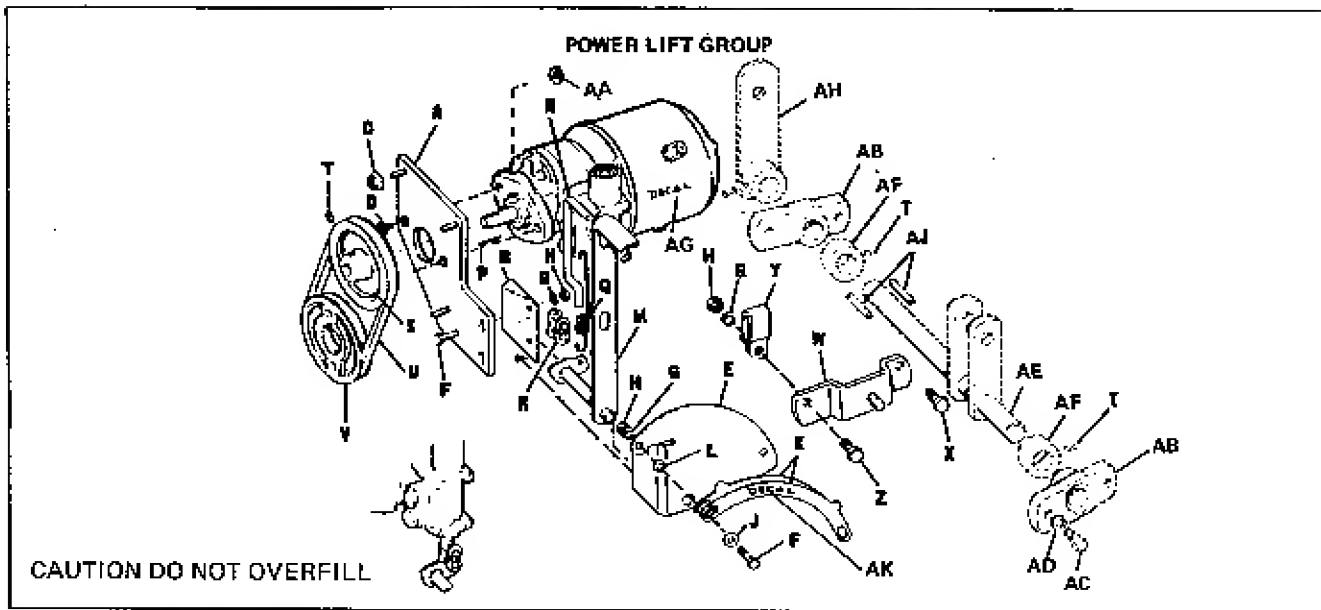
# POWER LIFT GROUP

NOTE: REMOVE PLASTIC CAPS BEFORE CONNECTING HOSES



Ref. Let.	Part No.	Description	Ref. Let.	Part No.	Description
A	164277	Fitting	AA	157407	"O" Ring
B	157210	Hose Assembly	AB	157405	"O" Ring
C	157211	Hose Assembly	AC	157444	"O" Ring
D	157236	Cylinder Assembly	AD	157445	Ball
E	157228	Side Bar	AE	157446	Pin Cam
F	720001	Lock Washer, 5/16"	AG	157448	Spring
G	717001	Full Hex. Nut, 5/16"-18	AH	157449	Cage
H	157225	Pin	AJ	157450	Drive Gear Assembly
J	722009	Cotter Pin, 1/8" x 3/4"	AK	157451	Dowel Pin
K	157194	Ram Bracket Pin	AL	157452	Front Cover Assembly
L	157001	Ram Bracket	AM	157453	Back Cover Assembly
M	705052	Hex. Cap Screw 7/16"-14 x 2 1/4"	AN	157454	Driven Gear Assembly
N	720006	Lock Washer, 7/16"	AP	157455	Bolt
P	157433	Heat Shield (for service only)	AQ	157456	Center, Section Machined
Q	157434	Gasket	AR	157457	Relief Valve Assembly
R	157435	Wear Plate	AS	157459	Screw
S	157436	Seal	AT	157460	Screw
T	157437	Rotary Seal	AU	157462	Filler Cap Plug
U	157438	"O" Ring	AV	157463	Drain Plug
V	157439	"O" Ring	AW	157464	Inlet Nipple
W	157404	"O" Ring	AX	157465	Inlet Elbow
X	157441	Stat-O-Seal	AY	157461	Tank Assembly
Y	157442	Shaft Drive Key			
Z	157406	"O" Ring			

# POWER LIFT GROUP



Ref. Let.	Part No.	Description
A	157587	Pump Support Assembly
B	157428	Angle Bracket
C	718033	Hex. Nut, Whiz Lock, 5/16"-18
D	709002	Machine Screw, Flat Hd., 3/8"-16 x 1 1/4"
E	157199	Quadrant
F	715057	Hex. Cap Screw, 1/4"-20 x 3/4"
G	720003	Lock Washer, 1/4"
H	717005	Full Hex. Nut, 1/4"-20
J	719006	Plain Washer, 1/4"
K	157204	Stop Plate
L	157205	Spacer
M	157200	Lever Assembly
N	157206	Latch Rod
P	722016	Cotter Pin, 3/32" x 5/8"
Q	157207	Spring
R	157208	Connecting Link
S	157430	Pump Pulley

Ref. Let.	Part No.	Description
T	713503	Set Screw, 5/16"-18 x 5/16"
U	157230	"V" Belt
V	157484	Drive Pulley
W	157233	Pivot Bar Assembly
X	705007	Hex. Cap Screw, 5/16"-18 x 1"
Y	157245	Hose Clamp
Z	705021	Hex. Cap Screw, 1/4"-20 x 1"
AA	718035	Nut, Whiz-Lock Flange, 3/8"-16
AB	157620	Lift Lever Bearing
AC	705031	Hex. Cap Screw, 3/8"-16 x 7/8"
AD	720002	Lock Washer, 3/8"
AE	157621	Lift Shaft Assembly
AF	157624	Set Collar
AG	157242	Decal
AH	157625	Front Lift Lever Assembly
AJ	157120	Key
AK	157232	Film

## INSTRUCTIONS FOR ADJUSTING HAND LEVER AND FLOAT STOPS OF QUADRANT ON POWER LIFT UNIT

Attach pump to pump support assembly No. 157587. Then attach support assembly to fuel tank and steering post support. Attach lever with connecting link to valve spool shaft.

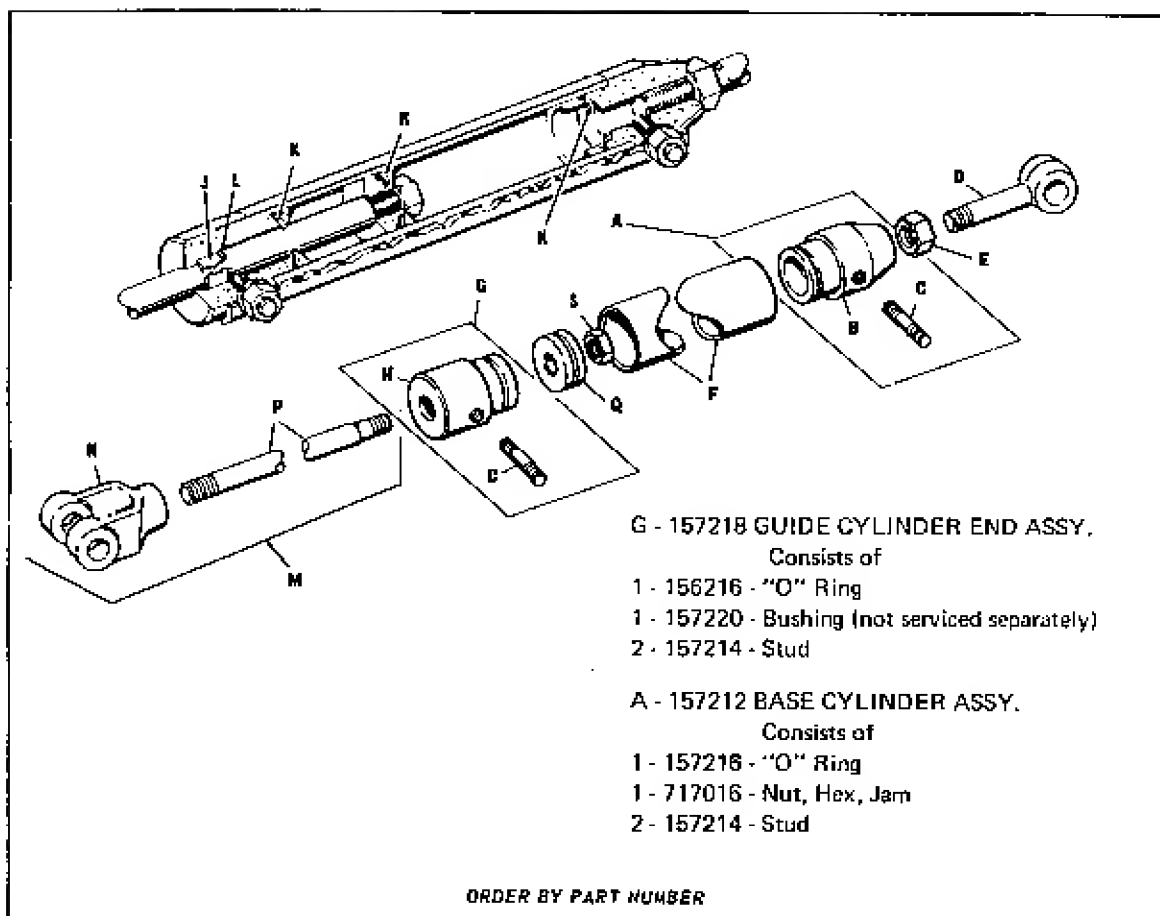
Place the lever No. 157200 with the latch rod No. 157206 in the exact middle of the two hex cap screws "F" located in the quadrant No. 157199. This is done by adjusting the angle bracket No. 157428 and quadrant No. 157199 up or down on the support No. 157587. Tighten the capscrews securing the bracket and quadrant to the support.

Move lever to most extreme position (front or rear). Bring stop plate up so notch is striking rod No. 157206 and secure capcrew "F" furthest from handle. Repeat procedure to the other stop plate.

Check rod No. 157206 in both positions. This rod is not to have ANY FREE MOVEMENT when in front or rear float position. Excessive play at this point increases back pressure on the pump and may cause overheating of the pump. If pump is moved to lift position (front or rear) and then drops the load before entering float position, readjust the hand lever to center of quadrant as described above. Oil lever and rod to insure free movement.

The bolts holding the pump and tank together should be checked and tightened to torque of 50-60 INCH POUNDS.

# POWER LIFT GROUP



Ref. Let.	Part No.	Description
A	157212	Cylinder Base Sub-Assembly
B	157213	Cylinder Base
C	157214	Stud Bolt, 5/16"-18 x 7/8"
D	157215	Bolt Eye
E	717016	Jam Hex. Nut, 1/2"-20
F	157217	Cylinder
G	157218	Sub Assembly Guide
H	157219	Cylinder End Guide
J	157220	Bushing

Ref. Let.	Part No.	Description
K	157216	"O" Ring
L	157670	"O" Ring
M	157222	Yoke & Rod Sub-Assembly
N	157223	Yoke
P	157224	Piston Rod
Q	157226	Piston
R	157668	"O" Ring
S	717009	Full Hex. Nut

## CAUTION

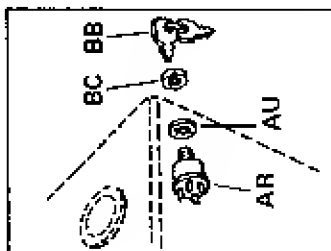
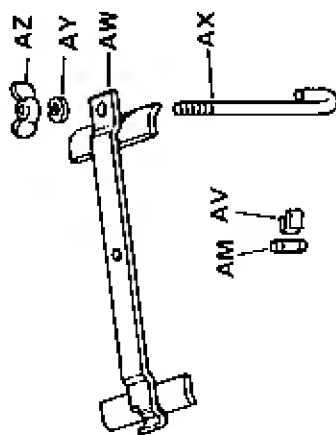
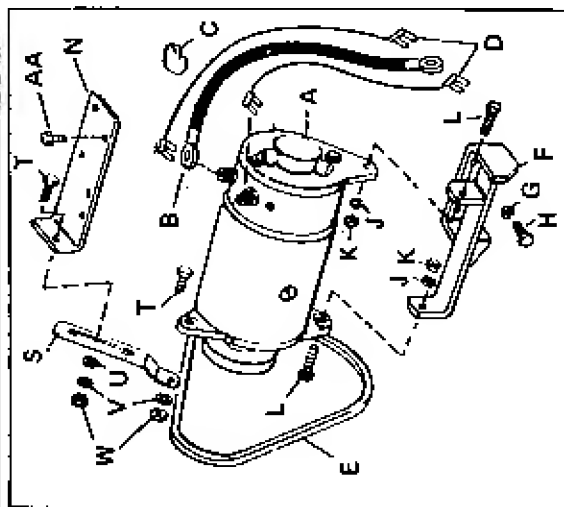
IT IS VITALLY IMPORTANT THAT THE HYDRAULIC FLUID AND ALL INTERNAL PARTS OF THIS UNIT BE KEPT COMPLETELY CLEAN AND FREE OF FOREIGN MATTER OF ANY TYPE.

USE UTMOST CARE IN ADDING OR CHECKING FLUID AND IN PERFORMING ANY SERVICE ON INTEGRAL PARTS.

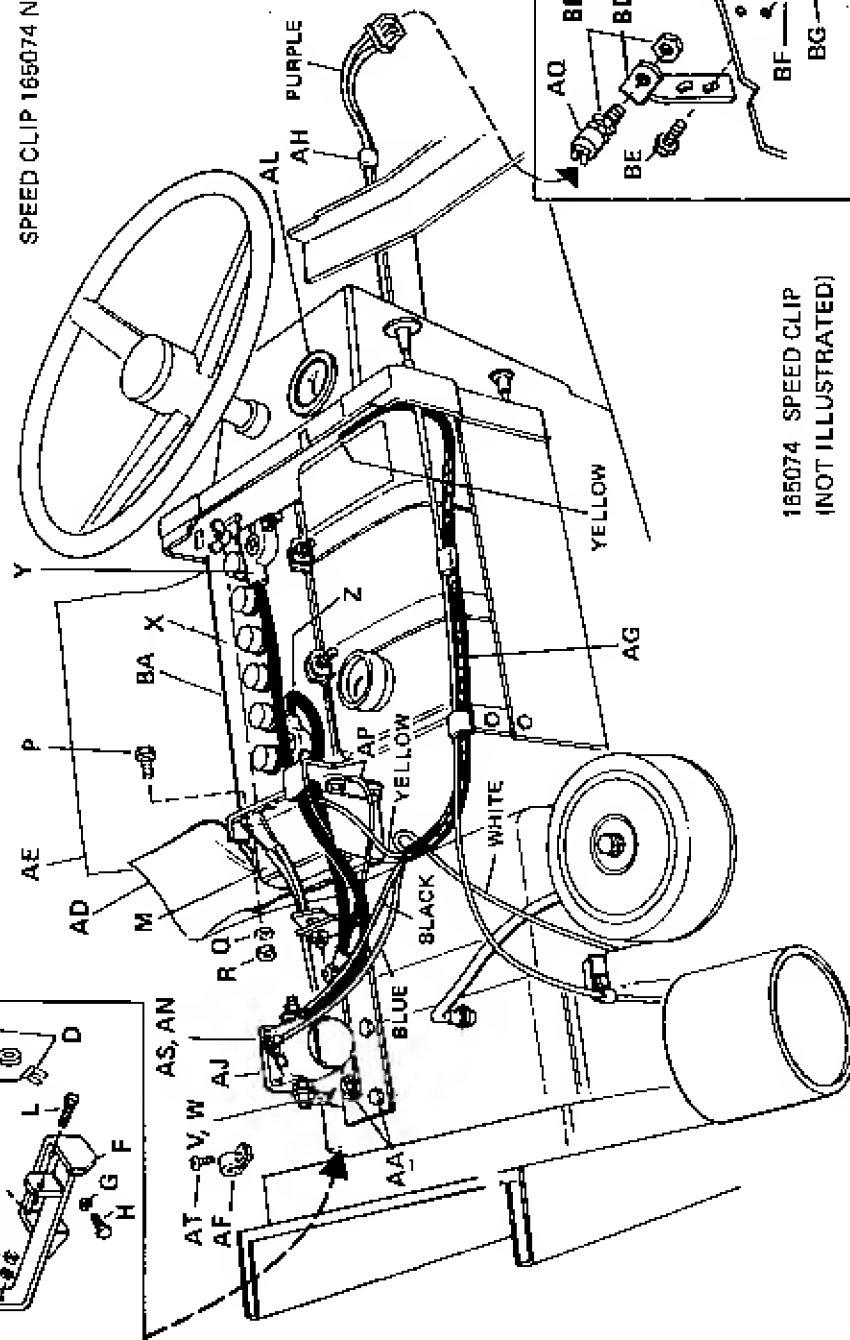
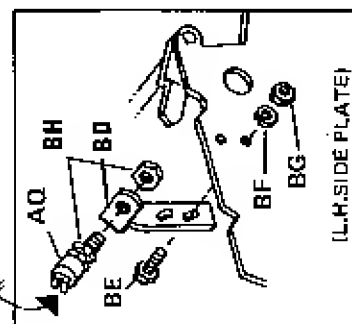
(For instance if a fitting or other part is dropped on a contaminated surface, the part must be carefully washed and dried before re-using.)

REMEMBER-HYDRAULICS DEMAND CLEANLINESS

## ELECTRIC STARTER-GENERATOR SYSTEM



SPEED CLIP 165074 NOT ILL.

165074 SPEED CLIP  
(NOT ILLUSTRATED)

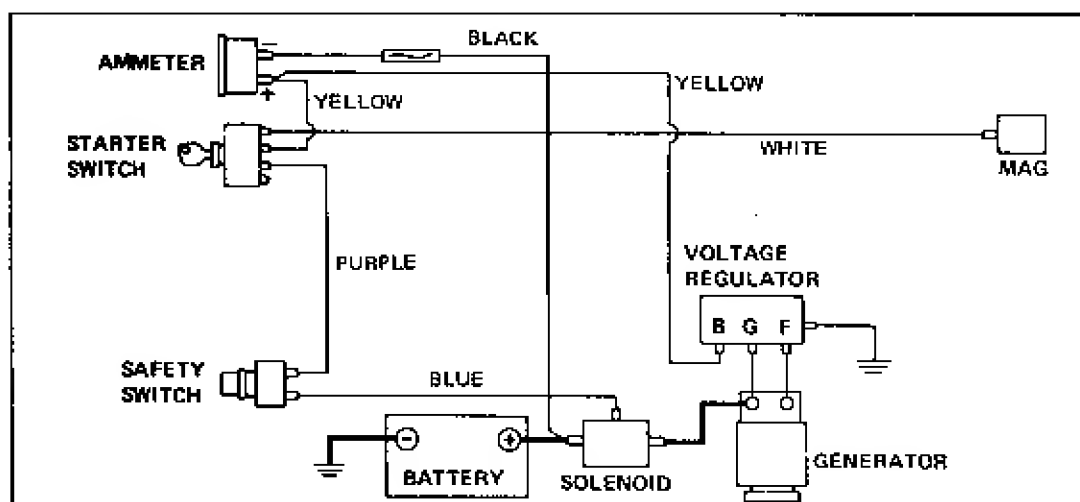
(L.H. SIDE PLATE)

## ELECTRIC STARTER-GENERATOR SYSTEM

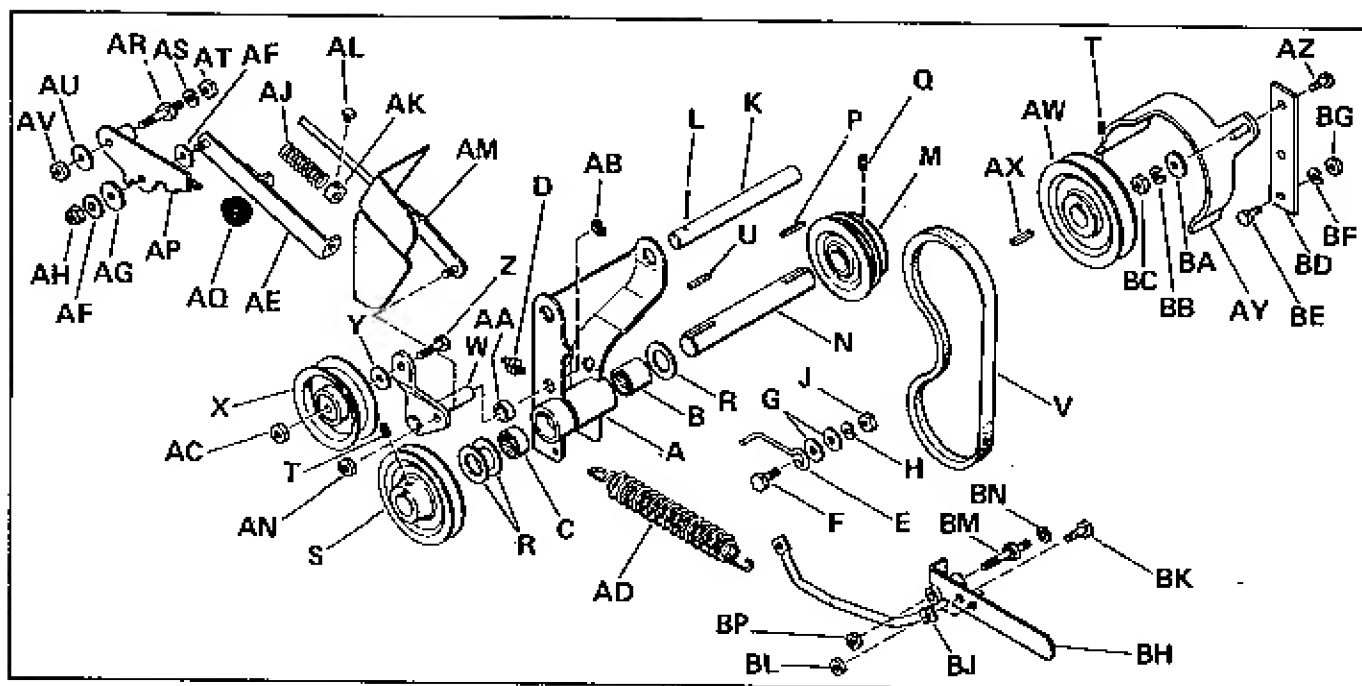
Ref. Let.	Part No.	Description
A	122236 **	Motor-Generator
B	122213	Generator Start Cable
C	122023	Terminal Cover
D	122140	Reg. Gen. Wire
E	157524	"V" Belt
F	157654	Support Assembly
G	720001	Lock Washer, 5/16"
H	715048	Hex. Cap Screw, 5/16"-18 x 3/4"
J	720001	Lock Washer, 5/16"
K	717001	Full Hex. Nut, 5/16"-18
L	705019	Hex. Cap Screw, 5/16"-18 x 1 1/4"
M	122193 **	Voltage Regulator
N	164254	Bracket
P	705030	Hex. Cap Screw, 1/4"-20 x 3/4"
Q	720003	Lock Washer, 1/4"
R	717005	Full Hex. Nut, 1/4"-20
S	157102	Belt Tightener
T	705017	Hex. Cap Screw, 5/16"-18 x 3/4"
U	719002	Plain Washer, 5/16"
V	720001	Lock Washer, 5/16"
W	717001	Full Hex. Nut, 5/16"-18
X	122190	Battery
Y	122204	Cable (Battery to Solenoid)
Z	122138	Cable (Battery to Ground)
AA	715090	Screw Hex. Thread Forming, 1/4" - 20 x 1/2"
AD	122142	Batter Insulation

Ref. Let.	Part No.	Description
AE	122143	Fuel Tank Insulation
AF	122195	Wire Clamp (Generator Cable)
AG	164256	Harness Assembly
AH	155073	Speed Clip
AJ	122216	Solenoid
AL	122131	Ammeter
AM	122172	Fuse, 20 Amp
AN	717007	Full Hex. Nut, 10-32
AP	122147	Wire (Ground to Ground)
AQ	122233	Safety Switch
AR	122201	Starter Switch w/Keys
AS	721003	Lock Washer, ext. No. 10
AT	714005	Rd. Hd. Screw 10-24 x 1/2"
AU	721509	Lock Washer Int. 9/16"
AV	122183	Clip Fuse
AW	170321	Battery Bracket
AX	122174	"J" Bolt
AY	720003	Lock Washer, 1/4"
AZ	718042	Wing Nut
BA	122199	Film, (SIMPLICITY)
BB	122203	Keys
BC	122235	Hex. Nut, Special
BD	166174	Switch Support
BE	705017	Hex. Cap Screw, 5/16"-18 x 3/4"
BF	720001	Lock Washer, 5/16"
BG	717001	Full Hex. Nut, 5/16"-18
BH	122234	Nut

\*\* FOR SERVICE CONTACT YOUR LOCAL  
UNITED MOTOR SERVICE DEALER (DELCO-REMY)



# POWER TAKE-OFF

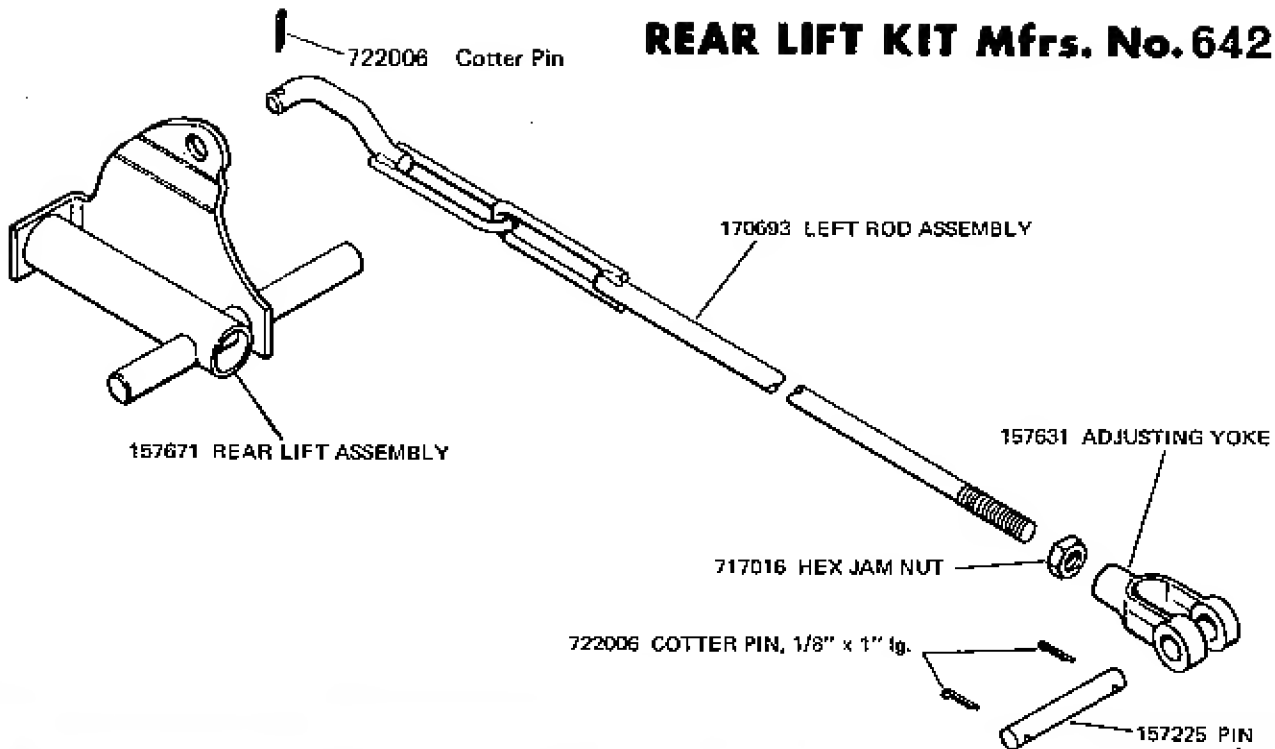


Ref. Let.	Part No.	Description
A	157675	Bracket, P.T.O. Ass'y.
B	157678	Bearing, Roller
C	157679	Bearing, Roller
D	727001	Grease Fitting
E	161080	Stop Belt
F	705007	Hex. Hd. Cap Screw, 5/16" - 18 N.C. x 1" Lg.
G	719002	Plain Washer, 5/16"
H	720001	Lock Washer, 5/16"
J	717001	Full Hex. Nut, 5/16" - 18 N.C.
K	154233	Rod Pivot, 5/8" Dia. x 6 - 13/16"
L	722007	Cotter Pin
M	157680	Pulley
N	157681	Shaft, P.T.O.
P	157427	Key,
Q	713502	Cup Pt. Skt. Hd. Screw Set, 5/16" - 18 N.C. x 1/4" Lg.
R	118252	Washer
S	157682	Pulley, P.T.O.
T	713503	Cup Pt. Skt. Hd. Screw Set, 5/16" - 18 N.C. x 5/16" Lg.
U	157427	Key,
V	157683	"V" Belt, P.T.O.
W	164241	Idler Lever Ass'y.
X	164268	Idler Pulley
Y	719002	Plain Washer, 5/16"
Z	705016	Hex. Cap Screw, 3/8" - 16 N.C. x 1 - 1/4"
AA	164244	Spacer
AB	157288	Retaining Ring
AC	717510	Full Lock Hex. Nut, 3/8" - 16 N.C.
AD	157262	Spring, Tension
AE	157684	Rod Guide Ass'y.
AF	719002	Plain Washer, 5/16"

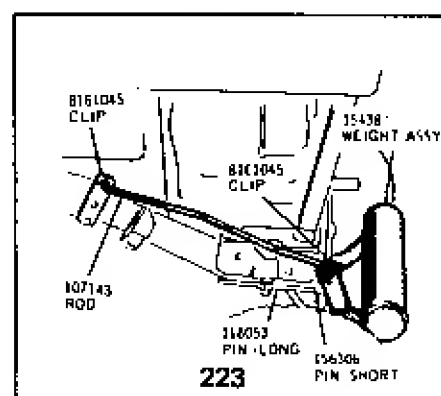
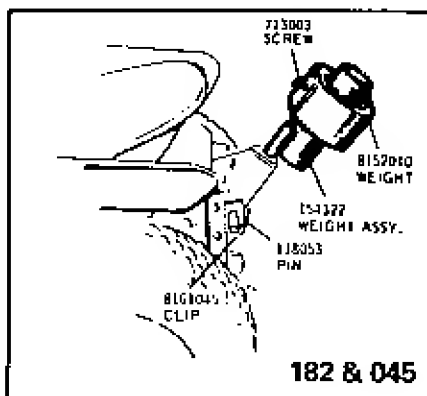
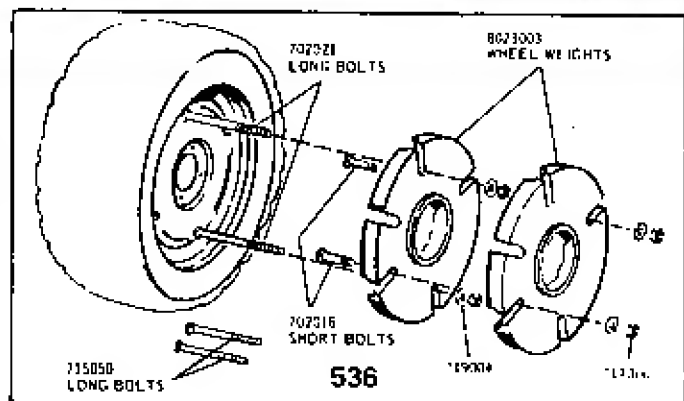
Ref. Let.	Part No.	Description
AG	159134	Washer, Special
AH	717525	Elastic Stop Nut, 5/16" - 18 N.C.
AJ	163103	Spring
AK	8191022	Set Collar
AL	713001	Cup Pt. Sq. Hd. Screw Set, 1/4"-20 N.C. x 3/8" Lg.
AM	164302	Rod Guide Assembly
AN	717510	Full Lock Hex. Nut, 3/8"-16 N.C.
AP	157690	Clutch Lever Ass'y, P.T.O.
AQ	122005	Knob, P.T.O.
AR	108771	Stud
AS	720002	Lock Washer, 3/8"
AT	717003	Full Hex. Nut, 3/8"-16 N.C.
AU	719002	Plain Washer, 5/16"
AV	717524	Stop Center Lock Jam Nut, 3/8"-16
AW	157694	Pulley
AX	8061081	Key
AY	164152	Guard Belt
AZ	705005	Hex. Cap Screw, 3/8"-16 N.C. x 1"
BA	719001	Plain Washer, 3/8"
BB	720002	Lock Washer, 3/8"
BC	717003	Full Hex. Nut, 3/8"-16 N.C.
BD	157050	Guard Belt Support, 3/16" x 1 1/4" x 5 7/16" Lg.
BE	705007	Hex. Cap Screw, 5/16"-18 N.C. x 1"
BF	720001	Lock Washer, 5/16"
BG	717001	Full Hex Nut, 5/16"-18 N.C.
BH	164155	Handle Ass'y.
BJ	164047	Spring Tension Rod
BK	705017	Hex. Cap Screw, 5/16"-18 N.C. x 3/4"
BL	717511	Full Lock Hex. Nut, 5/16"-18 N.C.
BM	157273	Stud
BN	720006	Lock Washer, 7/16"
BP	717519	Full Lock Hex. Nut, 7/16"-14 N.C.



## REAR LIFT KIT Mfrs. No. 642

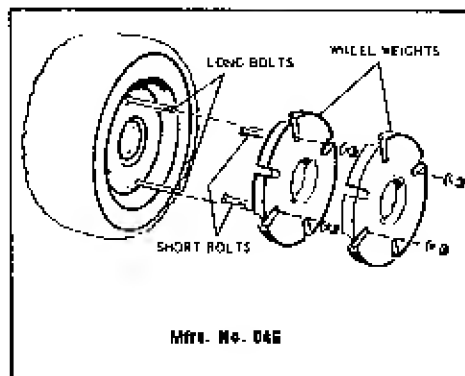
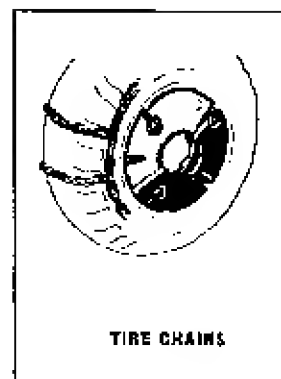
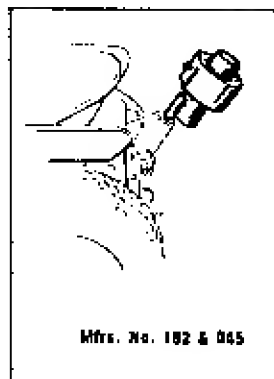
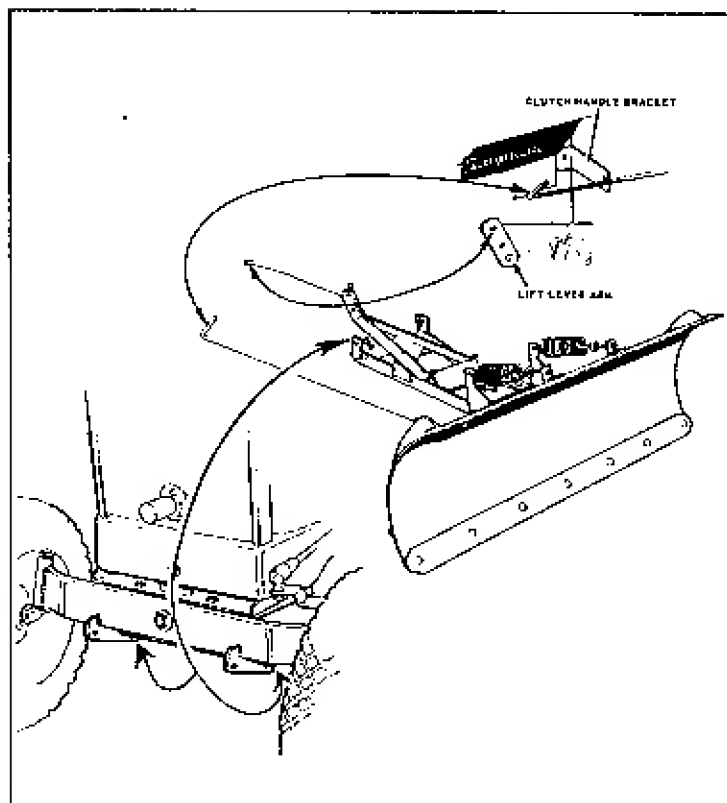


FRONT COUNTER WEIGHT . . . MFR. NO. 223  
 REAR COUNTER WEIGHT . . . MFR. NO. 182  
 WEIGHT (USE WITH 182) . . . MFR. NO. 045  
 WHEEL WEIGHT . . . . . MFR. NO. 536



# 46" DOZER BLADE

Mfrs. No. 356



The 46" Snow plow and Dozer blade can be used without any weights or chains. HOWEVER, by using these items, plowing and dozing will be done more effectively and efficiently.

Using the rear counter weight (Mfg. # 182 with # 045) will ease lifting of the front mounted attachments. This is mounted on the rear lift assy. Using wheel weights (1 or 2 on either side) will provide more traction. By adding chains with the wheel weights additional traction will be experienced. Loose mounting of the chains will assist in their self cleaning.

## OPERATION

There are five operating positions for this blade. The position can be changed by the operator without leaving the seat. Turn the control rod clockwise to unlatch the blade. Push or pull rod to the desired position. For ease of changing positions, raise blade slightly from the ground.

By adjusting the shoe assembly, various blade heights can be achieved. Increased height adjustment can be done by adjusting the stoppin in the lift lever quadrant.

If the blade is used with the Hydraulic unit, front or rear float position can be utilized. Using the front float position will provide a downward pressure on the blade. Rear float will give an upward pressure. HOWEVER in either position the blade will follow the ground. The Hydraulic Unit can be used for a stationary position also.

The wear plate is reversible. When one side is worn, remove the bolts turn plate around and reinstall bolts.

## LUBRICATION

Lubricate all joints where rods enter holes. Also lubricate pivot points. Periodic lubrication will assist in ease of operation.

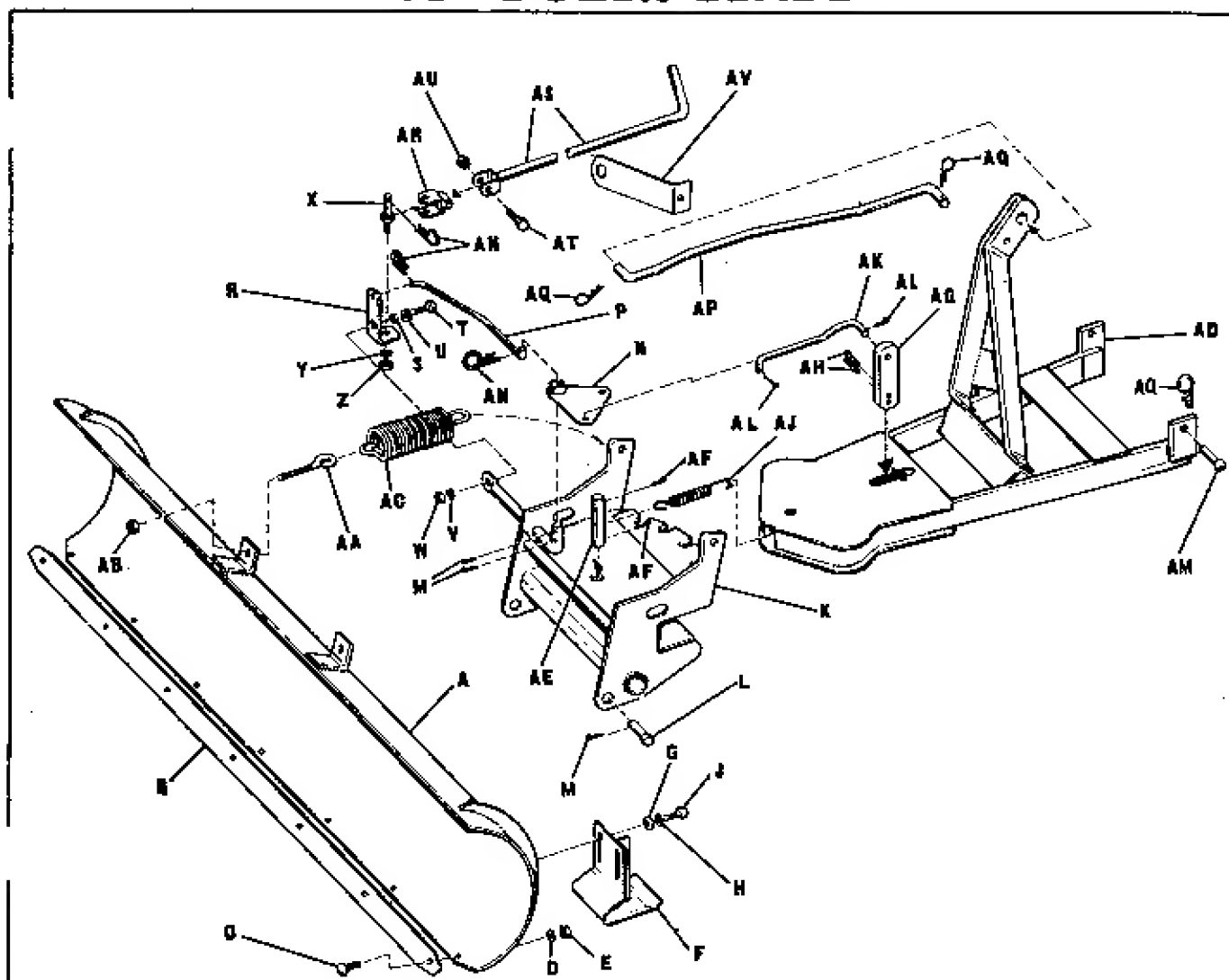
## PACKING

The 46" Snow Plow and Dozer Blade comes in one carton with all necessary hardware.

## ASSEMBLY

Attach hitch assembly to blade assembly, using the two yoke pins and cotter pins provided. Using the two eye bolts, attach spring from hitch to blade. Allow 1/2" of thread to show thru nuts. Attach to tractor as indicated in Fig. 1 with the two pins and spring clips. Attach blade direction rod bracket to top screw on right hand side of the Fuel Tank & Steering Post Support Assembly. See Fig. 1. (If this bracket has been installed for usage with another implement, it need not be removed) Attach lift rod to tractor lift lever (top Hole) and to plow. Fig. 1. Insert blade direction rod thru bracket and attach to blade. Secure in place with spring clips.

# 46" DOZER BLADE

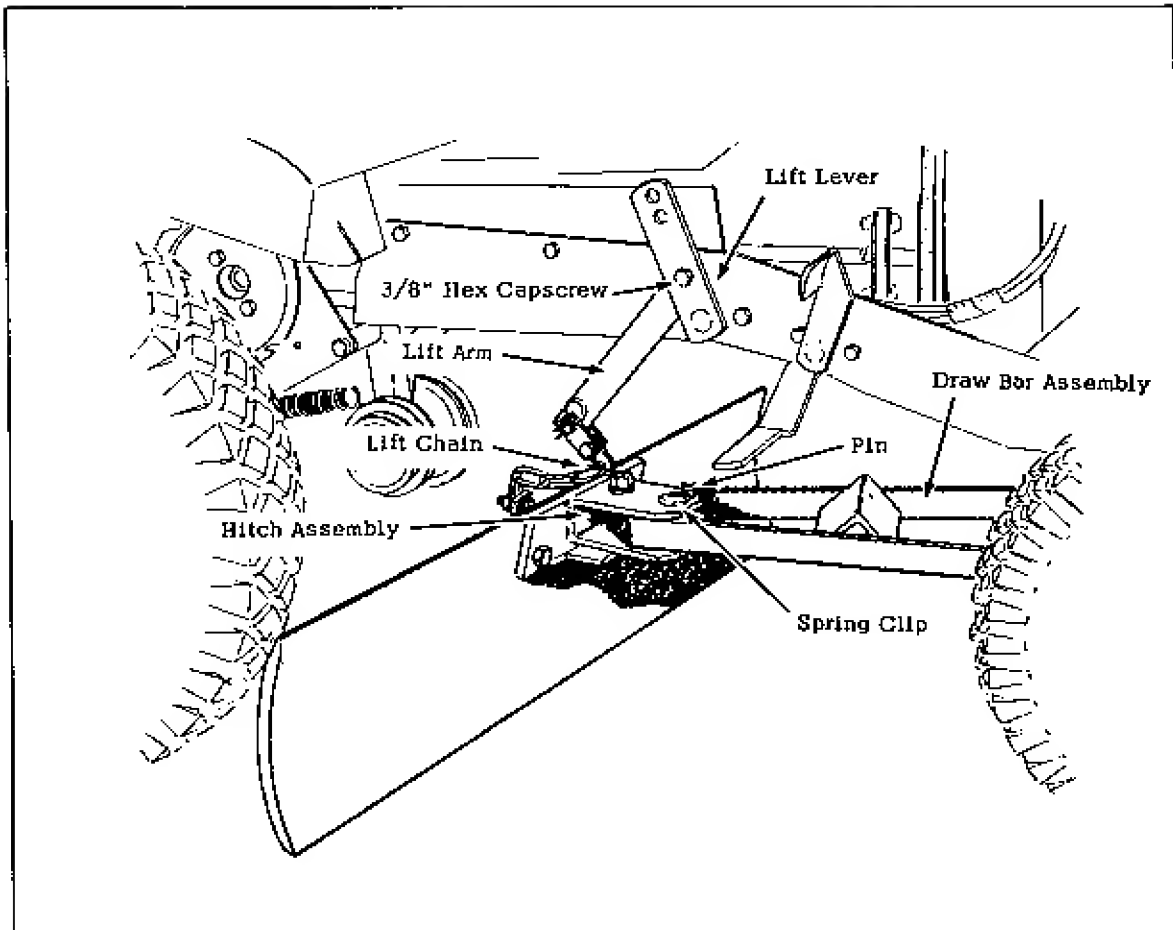


Ref. Let.	Part No.	Description
A	107096	Blade Ass'y
B	107105	Wear Plate
C	702002	Carriage Bolt, 3/8"-16 x 1" lg.
D	720002	Lock Washer 3/8"
E	717003	Full Hex Nut 3/8"-16 N.C.
F	107106	Shoe Ass'y.
G	719001	Flat Washer 3/8"
H	720002	Lock Washer 3/8"
J	705004	Hex. Cap Screw 3/8" - 16 x 3/4"
K	107109	Pivot Frame Ass'y
L	154305	Yoke Pin
M	722006	Cotter Pin 1/8 Dia. x 1"
N	107116	Pivot Plate Ass'y
P	107118	Pivot Rod
Q	106687	Bracket
R	107119	Pivot Arm
S	156150	Spacer
T	705007	Hex Cap Screw 5/16"-18 x 1" lg.
U	719002	Plain Washer 5/16"
V	720001	Lock Washer 5/16"
W	717001	Full Hex. Nut 5/16"-18 N.C.
X	107120	Pivot Stud

Ref. Let.	Part No.	Description
Y	720001	Lock Washer 5/16"
Z	717001	Full Hex. Nut 5/16"-18
AA	107121	Eyebolt
AB	717001	Full Hex. Nut 5/16"-18
AC	101126	Spring
AD	107122	Push Bar Ass'y
AE	107133	Pivot Pin 5/8" Dia. x 3-3/8" lg.
AF	722003	Cotter Pin 3/16 x 1-1/4" lg.
AG	107134	Latch
AH	723002	Roll Pin 7/32" Dia. x 1" lg.
AJ	107135	Latch Spring
AK	107136	Latch Rod
AL	722016	Cotter Pin 3/32" Dia. x 5/8"
AM	118053	(Hitch) Pin
AN	106787	Spring Clip
AP	107143	Front Lift- Rod
AQ	106788	Spring Clip
AR	106131	Fork Ass'y
AS	107137	Handle Ass'y
AT	705018	Hex. Cap Screw 5/16"-18 x 1-1/2"
AU	717511	Full Lock Hex. Nut 5/16"-18

# 42" GRADER BLADE

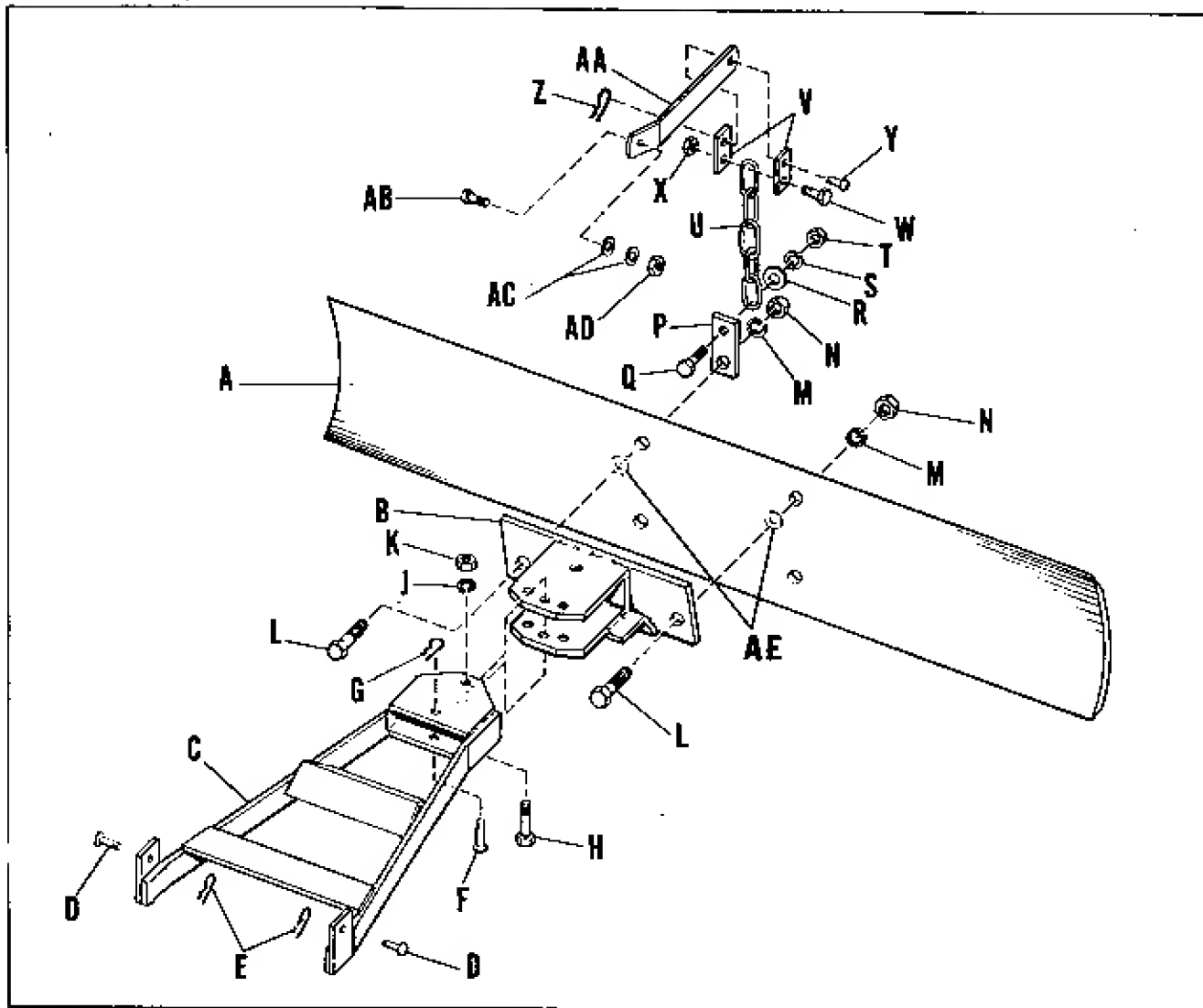
Mfr's. No. 237



The 42" Grader Blade is attached to the tractor as shown in the above illustration by following the sequence of steps as outlined below.

1. Position the grader blade under the tractor so that the draw bar assembly may be connected to the front hitch brackets of the tractor. Secure in place with 2 pins and spring clips.
2. Attach the lift lever to the lift arm of the tractor as shown, placing 2 plain washers between the lift lever and lift arm. Fasten securely with a 3/8" hex head cap screw and lock nut.
3. Attach the lift chain and links to the lift lever with a pin and spring clip so that the blade can be lifted high enough to clear the ground when transporting from one location to another.
4. When desired, the blade may be angled to the left or right by removing the pin and spring clip from the center hole in the hitch assembly. Lock the blade in desired position by replacing the pin and spring clip when the alternate holes in the hitch assembly line up with the hole in the draw bar.

# 42" GRADER BLADE



Order by Part Number

Ref. Letter	Part No.	Description
A	107056	Blade, Grader, 42"
B	107058	Hitch Assembly
C	107062	Draw Bar Assembly
D	118053	Pin
E	8161045	Spring Clip
F	8181008	Pin
G	8021024	Spring Clip
H	705056	Capscrew, Hex Head, 5/8"-11 NC x 3" lg.
I	720005	Lockwasher, 5/8"
K	717004	Nut, Hex, Full, 5/8"-11 NC
L	705055	Capscrew, Hex Head, 5/8"-11 NC x 2" lg.
M	720005	Lockwasher, 5/8"
N	717004	Nut, Hex, Full, 5/8"-11 NC
P	107057	Link
Q	705005	Capscrew, Hex Head, 3/8"-16 NC x 1 1/4" lg.

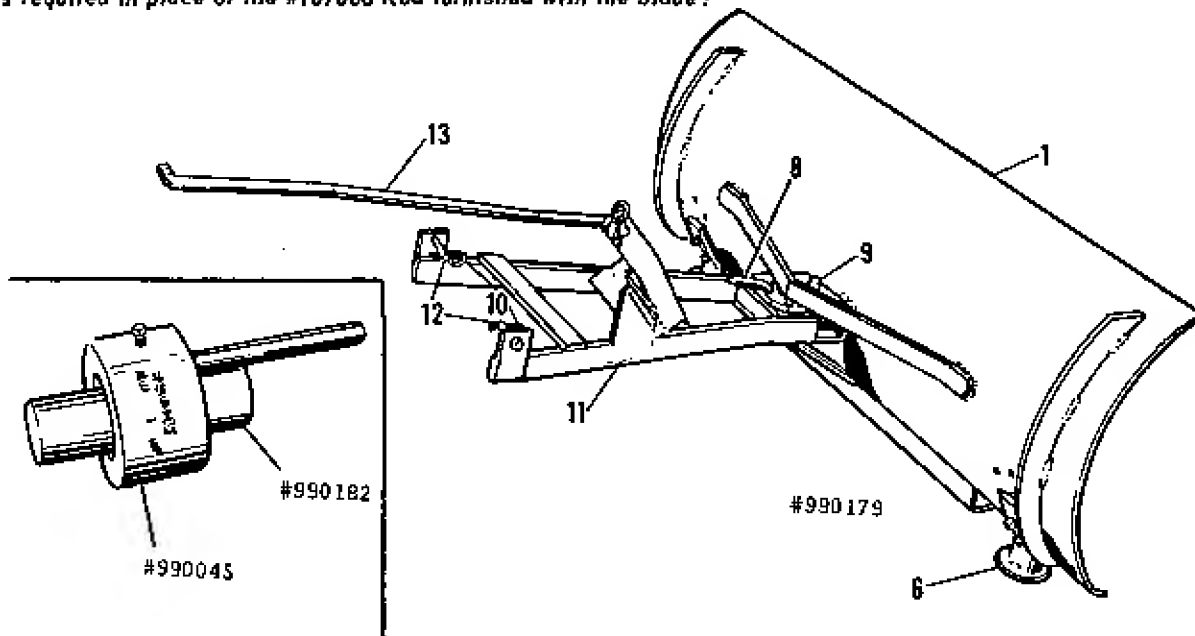
Order by Part Number

Ref. Letter	Part No.	Description
R	719001	Plain Washer, 3/8"
S	720002	Lock Washer, 3/8"
T	717003	Nut, Hex, Full, 3/8"-16 NC
U	107031	Chain
V	108199	Link
W	705005	Capscrew, Hex Head, 3/8"-16 NC x 1 1/4" lg.
X	717510	Nut, Hex, Full, Lock, 3/8"-16 NC
Y	153058	Pin
Z	8161045	Spring Clip
AA	108198	Lever
AB	705016	Capscrew, Hex Head, 3/8"-16 NC x 1 1/4" lg.
AC	719001	Plain Washer, 3/8"
AD	717510	Nut, Hex, Full, Lock, 3/8"-16 NC
AE	121210	Flat Washer, 1-1/16"

# 42" SNOW PLOW & DOZER

MFR'S. NO. 179

*When using this blade with the Model 725, a #107046 Lift Rod is required in place of the #107086 Rod furnished with the blade!*



## PACKING

The 42" snow plow and dozer comes packed complete in one bundle.

## ASSEMBLY

Attach push bar (11) to blade (1) using king pin (9) and install a spring clip through the king pin. Attach the front lift rod (13) to the push bar as shown. Drop the pivot pin (8) thru the blade assembly bracket and push bar.

## ATTACHMENT

To attach the 42" snow plow and dozer to the LANDLORD Riding Tractor, all that is required is to connect pins (12) to the tractor front hitch and safety clip (10); and to connect the front lift rod (13) to the tractors lift arm.

## OPERATION

Alternate holes are provided to permit adjustment of the shoe assemblies (6) for raising

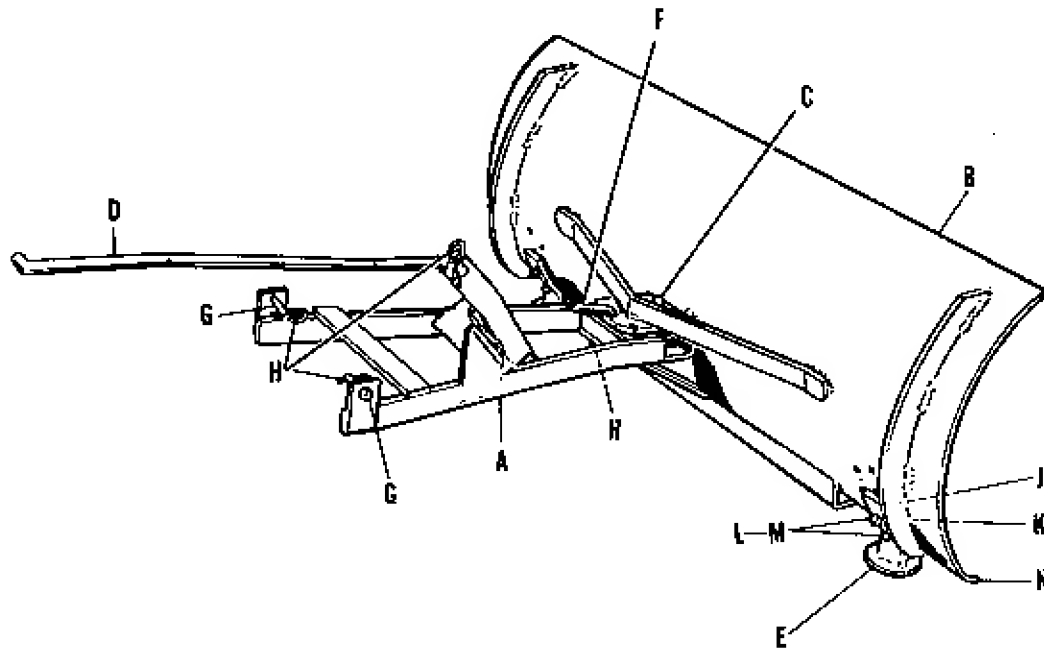
or lowering the blade when cleaning gravel drives or walks. When cleaning concrete it is desirable to allow the blade to scrape the surface.

The angle of the blade is adjustable to permit plowing to the left or right by moving pivot pin (8) to the desired hole in the blade mounting bracket.

For ease of lifting equipment, it is well to use the counterweight (990182) and additional weight (990045) when using the 42" snowplow and grader on the LANDLORD Riding Tractor. These counterweights are mounted on the rear lift assembly.

When using this equipment it is recommended that chains and wheel weights be installed on the tractor. Loose mounting of the chains will make them self-cleaning.

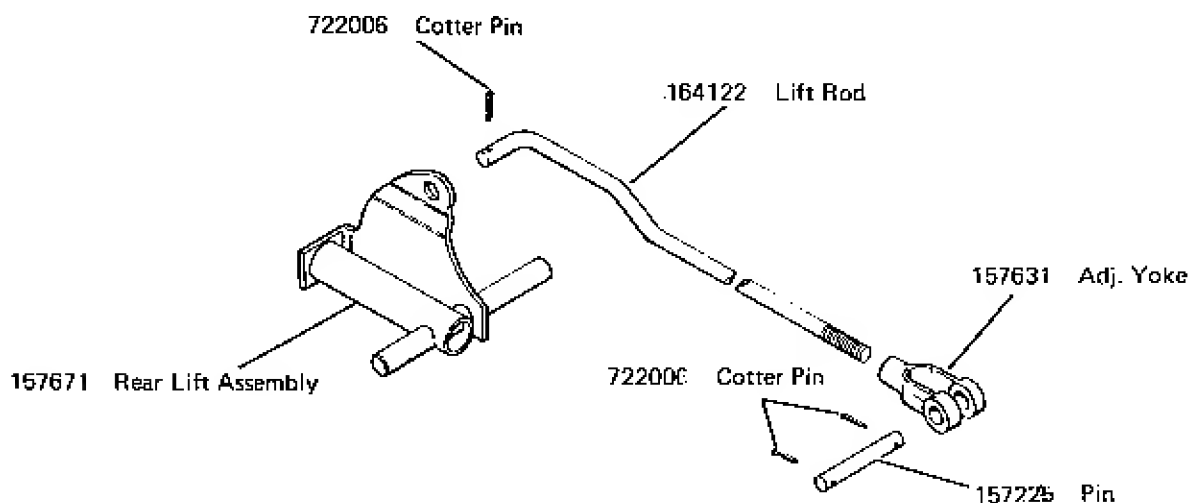
## 42" SNOW PLOW AND GRADER



Ref. Let.	Part No.	Description
A	107049	Push Bar Assembly
3	107047	Blade Assembly
C	8181008	Pin, King, 1/2" dia. x 2 1/2"
D	107143	Rod, Front Lift
E	107024	Shoe Assembly
F	8181003	Pin, Pivot
G	118053	Pin

Ref. Let.	Part No.	Description
H	106788	Clip, Spring
J	702002	Bolt, Carriage, 3/8"-16 x 3/4"
K	702003	Bolt, Carriage, 3/8"-16 x 3/4"
L	720002	Washer, Lock, 3/8"
M	717003	Nut, Hex. Full, 3/8"-16 N.C.
N	107045	Plate, Wear

## REAR LIFT KIT Mfrs. No. 622



## **BATTERY INSTRUCTIONS**

With proper care this battery should give the long service life built into it.

A battery which does not function properly is not necessarily worn out or defective. It may only need a good recharge. Therefore, if battery trouble is suspected, a full recharge and test by a competent battery man is recommended.

### **PUTTING DRY-CHARGED BATTERIES IN SERVICE**

Remove wicks or tape covering from vent hole in filler caps. Make sure vent holes are open so battery gases produced when battery is charging can escape. If necessary, run a fine wire in vent hole to be sure it is open and free of all obstructions.

Fill battery with 1.265 specific gravity electrolyte or acid to proper level or 3/16 inch above plates and separators assuming room, battery, and electrolyte temperature is 70° - 100° Fahrenheit.

Allow battery to set for 20 minutes. Battery can then be installed but to obtain best results and maximum capacity, place battery on charge after the 20-minute setting period at 6 amperes until gravity reading is 1.265 - 1.275. If room, battery and electrolyte temperatures are below normal a longer charging period will be mandatory to bring the specific gravity up to 1.265 - 1.275.

### **WARNING**

Under no conditions should battery be filled more than 3/16" over the plates. We cannot be responsible for damages if this warning is not observed.

### **CARE IN SERVICE**

A hydrometer test of the battery solution should be made monthly. If the specific gravity tests 1.225 or less, the battery should be removed and thoroughly recharged. At the same time the solution level should be examined and distilled water added when necessary to retain the level of 3/16" over the plates. When necessary to add distilled water it should always be done just prior to recharging to mix the added water thoroughly into the solution.

When recharging is necessary and user does not have his own charging equipment, he should request service station to slow charge the battery at a rate of 4 to 6 amperes.

Any collection of grease or any other substance should be kept removed from the top of the battery and the top kept dry and clean at all times. The battery should be kept snug in its cradle and not permitted to get loose. If removed for charging, it should be fastened back in snugly enough to prevent any movement when in use. Vent caps should be kept tight and the small vent holes in top or side of cap be kept open at all times to permit escape of gases formed in the battery. Care should be exercised not to overfill the battery at any time and to always retain 3/16" of solution above the plates.

### **WINTER CARE**

If battery will not be used during the winter months it should be removed and stored in a cool, dry place. Any collection of grease or other substance should be removed from the top of the battery.

The battery must be recharged monthly or whenever the hydrometer reads less than 1.225. Before reinstalling the battery in the spring, it should always be given a thorough recharge.